

From The Staff:

WTFDA Headquarters, P.O. Box 97, Cahmet City, IL 60409

F2 MAKES QUICK RETURN...F2 skip conditions above 30 MHz have been improving rapidly in recent weeks, to the point where 41 MHz British TV audio has already been noted by DXers in eastern North America. F2 skip watchers can expect some great DX in coming weeks. Be prepared--most of the best activity will probably take place before mid-December, with the current sunspot cycle now on the "downward slope."

PHOTO SERVICE...EASTERN TV DX editor Robert Kramer has made an offer to process TV DX photos free, through his photo service, when they are for use in the VUD. In return for this, we've let him tell you all about his custom TV DX photo processing service in an ad in this month's VUD. See page 51 for details.

1980 CONVENTION REPORT...A report on this year's 1980 WTFDA convention will have to wait until next month. In the meantime, here's another reminder for those interested in hosting WTFDA's 1981 convention: deadline for bids is November 30. In the event of more than one proposed site, we'll have a membership vote. Those interested in hosting can obtain info from WTFDA HQ.

COLUMN NEWS...VHF UTILITY DX is back after a two-month absence...PHOTO NEWS should return in November...NORTHERN FM DX editor Ralph Strobel has a fascinating report of what the FM and TV bands are like in several European locations in this issue.

SUPER NEW FM DX RECEIVER...FM DXers shouldn't miss Peter Sawatzky's review of the new Akai AT-VQ4 tuner. With features practically made to order for FM DX purposes, and digital frequency readout, you may want to check this tuner out. The October, 1980 issue of *Audio* magazine, one of the best of the hi-fi publications, lists this fantastic unit at only \$279 in the U.S. If you've checked tuner prices lately, you'll know what a bargain that really is!

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MAILBOX

John Zondlo
1802 W. Rockwell
Apt. 107
Bethany, OK 73008
(405) 787-3717
Deadline: 5th

New Members:

Jim Albrecht
Gerald Barkow
Patrick Durkin, Jr.
John Gerler

Tom Haskett
Tom Jackowski
David Newkirk
Lonnie Nine
David B. Riley

Paul Swearingen
Allan Walker
James Yaratto

3313 N. Weil St.
29 Sedgefield Drive
8829 W. Orchard St.
6499 Chateau Court,
Apt. 269

3831 Hendricks Place
8 Marcia St.
1208 N.E. 91st St.
Route 2, Box 287
37048 Polk Court,
Apt. 732

P.O. Box 500
Box 3246
9549 20th Bay St.

Milwaukee, WI 53212
Morris Plains, NJ 07950
West Allis, WI 53214
Riverdale, GA 30274

Gary, IN 46408
Parlin, NJ 08859
Seattle, WA 98115
Monett, MO 65708
Farmington Hills, MI 48018

Moran, KS 66755
Enfield, CT 06082
Norfolk, VA 23518

745-5909

Renewals:

Jim Alexander, John Barber, Jr., R.S. Broadhead, Roosevelt Crawford, Kocsis Ferenc, Bill Heusmann, Tom Huehn, Jim Korn, Mark Lucas, Ian Meyers, David Moody, Kurt Nelson, Walter Patton, Robert Ross, Rich Turcsany, John Walters, Paul and Dave Wardell, Larry Weil, Michael Wimer.

Rejoins:

Robert A. Curtis-17 Cobbleview Drive-Colchester, VT 05446
Roger Horie-2071 Kaumana Drive-Hilo, HI 96720
Bill Wigley-922 Carpico Drive-Lancaster, OH 43130

Address Changes:

Richard Eckman-2900 E. Aurora Ave., #359-Boulder, CO 80303
George Gallacher-RR 1, Kozy Kourt Lot #32-Ossian, IN 46777
Mark Lucas-331 Reber Ave.-Lancaster, OH 43130
Joseph Markewicz-1408 Maple Grove Road, Apt. 315-Duluth, MN 55811
Dr. Michael Rosen-265 Main St., Apt. 515-Ridgefield Park, NJ 07860
Wayne Thompson-3900 Memorial Drive, Apt. D7-Decatur, GA 30032

Renewals Due in November:

J. Mario Abrego, Nicolas Beja Baruh, B.W. Battin, Albert J. Bernard, Leo Boehl, G. Cranston Bonnell, Don Erickson, Bill Fahber, Perry Ferrell, Robert Fischer, Robert Foxworth, Robert Grant, Richard Hawkins, Roy D. Horsley, John Jefferson, Michael Koronka, Ed Kowalski, Frederick Martin, Deane McIntyre, Mike Mitock, Dave Pomeroy, Marvin Shults, Ken Simon, Gary Walsh, Thomas Weeden, William Wuxtzell, Tom Yingling, Jr.

Leading off this month's new members is long-time and well-respected IRCA member JIM ALBRECHT. We'll let Jim and fellow new members DAVID NEWKIRK and LONNIE NINE introduce themselves in Tidbits.

GERALD BARKOW is a designer who is into TV and BCB DX. He also belongs to NRC and NNRC.

Next up is JOHN GERLER, who has a busy profession- airline radio operator. He enjoys listening to BCB, shortwave and the aircraft bands, and belongs to NRC.

Another NRCer joining our ranks this month is TOM JACKOWSKI. He writes, "I have tried to DX FM, but have been unsuccessful. That's why I have sent for your Beyond Shortwave booklet. I also would like to learn a lot more about TV DXing even though I have been DXing for 2 years with 67 stations logged." You've come to the right place, Tom!

Another engineer in the club? That's right! DAVID RILEY is an engineer for WXYZ 7 Detroit MI. As I recall, Rod Luoma of WTFDA is an engineer at your competition, WJBK, David.

Tidbits.....

Congratulations go out to Andy Bolin, who passed the 2,000 mark in FM catches August 24. #2,000 was KRCH 101.7 Rochester MN. Way to go, Andy!!

As promised, let's start our extended intros with Jim Albrecht: "I recently got into the FM DX hobby although I've been DXing AM since 1971 and belong to the IRCA. I became interested in FM DX when noticing a strong temperature inversion on the local weather radar on TV. This was last September. My first catch was WJML 98.9 Petosky MI. To this date I've heard 224 stations in less than one year. My receiver is a Panasonic RF-2200, which is so sensitive it picks up images from stations like WOJO 105.1 Evanston IL, WPLS 107.3 Greenville MI, and WLJY 106.5 Marshfield WI. My location certainly wouldn't be called the greatest. I live some 6 blocks to one mile from a tower farm, which houses WZUW 95.7, WTKI 94.5, WPMR 96.5, WEZW 103.7, WLPX 97.3, WUTM 89.7, and WYMS 88.8, and get images from these plus and pest of the local stations. Despite this, I've heard most of the catches from this location. Others heard at the lakefront and at a friend's house. I've heard stations on E-skip only twice, 6/18/80 and 7/17/80. My best catch so far on E-skip is KVLV 107.9 Edinburg TX. FM DX is quite exciting and would like to learn more about meteor scatter and auroral conditions. Look forward to contributing to this club."

Next in line is new member David Newkirk: "Radio has been a fascination for me since 1968, when I first sat down with a BCB radio and found WWL, WVVA, even KFI in my ears between and beyond the local programming. An amateur license followed -- WNSCJS -- in 1969, with BCB and 3-30 MHz SWling still great interests. I had the privilege of undertaking a 3 year stint with the American Radio Relay League in the service of amateur radio from 1974 to 1977, with the permutations in amateur callsign you might expect resulting from a move to Connecticut from my native Chicago."

"Now, I find myself in the state of Washington with new responsibilities and interests. As you may know, I was selected to author a chapter on the listening side of non-professional radio for ARRL's Operating Manual, published just this June. I went into the project suspecting that it would be a new beginning for my radio learning. And indeed it was! One matures rapidly when his knowledge is subjected to wide scrutiny. I've had the pleasure of scratching the surface of a number of radio pursuits I had not been involved with before my research for the chapter began. I want that learning to continue. The world above 30 MHz is a new world for me, and what I've heard about WTFDA assures me that it's a club offering the best window into that world a club can provide."

Our third extended intro is from Lonnie Nine: "I am a member of WRC and have DXed the AM band for years, but have never been serious or organized about it. Just dialed around seeing what could be heard. Due to that interest, I purchased a GE Superadio because it was reasonably priced and had a good reputation for AM sensitivity and selectivity. The receiver was as good as its reputation and in addition it had a good (but not great) FM section. After listening to FM for a short while I decided that the radio was probably worthy of a good antenna, so I bought a 10 element Archer and a Channel Master rotor. I then discovered that FM DX was possible. Within about 6 weeks, I heard 172 stations (I kept a log of sorts on these, something I'd never done on AM) and counted 12 states. Enough interest in that so I wrote asking for a sample of the VHF-UHF Digest. Now I am really interested and have many questions after seeing those reports in the July 1980 edition. I am now thinking about a purchase of a receiver or tuner so that I can really DX the FM band. I am 46 years old and am meteorologist-in-charge of a radar station operated by the National Weather Service. We also take upper air soundings. I live on a small farm just southeast of Monett, MO. There are two local FM stations, one in Monett and one in Aurora. As you see, I am a novice at FM DX and could use advice as I begin to search for a good rig (at a reasonable price)."

Let's hear now from Saul Chernow: "I've noticed a lack in this club and have decided to help eliminate it. In all MW clubs there is a 'sports' column and thus all MW 'sports units' can be solved. But what happens when, on FM, you hear a brief meteor scatter spurt from a Texas-Yankees game on 102.5, but as you have no network lists, you can only guess. The same applies to TV. Even with tropo or Es, who wants to sit around and wait for an ID when other stuff awaits? I am therefore volunteering my services, but I need help. I will keep up-to-date files on sports nets. All you have to do to solve an UNID is to send it, plus a SASE, to my address (see end of Tidbit). I would also appreciate info on nets and

(Chernow, cont.) flagships, etc. Otherwise, this venture will not be possible. If this is successful as a service and if the BoD feels it appropriate, this could eventually, in itself, create a new VUD column. We'll wait and see. I'm covering all major league sports in Canada and the USA only: baseball, hockey, football, basketball and soccer. In addition, I'll also cover all college, junior, etc., hockey, basketball, and football, and events like the Indy 500, racing, etc....only on contributor requests. If this really works out and I get a nice load of support, I may do shows like "Dr. Demento," etc. Remember, I need support just like any other column. I sincerely believe this will be a necessary and successful addition to the wonderful world of DX. Write to: Sports Data, c/o Saul Chernow, 79 Ridge Drive, Toronto, Ontario, Canada M6M 1C0." Saul, in his letter, requested my comments on the matter, so here goes: First of all, we're always open to the submission of any sports network lists. I'm glad someone is taking the initiative to round them up. Whether it merits being a separate column, tho, is questionable. While contributors are very valuable in compiling such a net list, it's also important to request an official list of network stations from each team listed. This is the way the BCB clubs do it. It also would not hurt to expand the list of sports covered, or list a 'specialty' sport if a station is known to carry it. For example, my alma mater's station, WBST 92.1 Muncie, IN, has been carrying Ball State men's volleyball because the team usually makes the NCAA finals. A word of caution about sports nets- no one should assume he has heard a station just because it is the only one on the frequency carrying the listed network program. The credibility of any DXer identifying stations solely on the basis of a network list must be questioned. Always try to get an ID or a local mention that would narrow the field down to the assumed station. Feel free to submit sports nets, Saul, and ask Bill Thompson about doing a regular column."

Good to have Bill Migley back in the club! He has some interesting comments as to why he dropped out for a while- "Extreme lack of technical and 'how-to' type articles. Over-emphasis on personal DX loggings that have little relevance to others." We can only print the technical articles we receive. How about you technically inclined folks contributing? Many thanks to the ones who have."

Wrapping it up this month, we continue a letter from West German DXer A.H. Wiese (Erwinoldstr. 175/2, D-8000 Munchen 83, West Germany): "Some VUD issues ago somebody told about a converter (I think from England) to convert VHF into UHF. I found a similar device here from a German firm. It works quite fine, but I had no opportunity to prove it with DX signals as no DX was happening since I purchased it. The thing converts 40-300 MHz into 570-830 MHz. It costs 85 DeutscheMark, that's something around \$50. Anybody interested should contact me, but I don't know how much the tax and mail would cost."

In 'Consumer Reports' from March '79 I saw an antenna test. Third best was Jerrold VIP304 for \$72. Here in Europe log-periodical antennas are not common - nobody sells them. So I thought of purchasing such an antenna from the US. Could anybody tell me where to write to order the Jerrold? (It's a log-periodic, isn't it?) (believe it is...Jerrold address is Byberry Road and Pennsylvania Turnpike, Hatboro, PA 19040 USA-jx). Are you interested in a West German antenna catalogue? Have the Hirschmann catalogue. Hirschmann is one of, if not the biggest, antenna firm here in Europe, but they only make yagis."

Well, I thought A.H.'s report would do it, but not quite. Let's see, how about some ANARC info? Jeff White will now edit the ANARC newsletter, replacing Dave Browns in that position. Dave remains Executive Secretary. The newsletter should look 100% better with Jeff doing it, and should be much more timely. Subscriptions are currently \$3.50 per year in North America, \$8 overseas. It's well worth it if you want to keep up on what's happening in other clubs. ANARC 1980 awards voted by delegates at the recent ANARC convention included North American DXer of the Year Lawrence Magne, International DXer of the Year Arthur Cushen, and Broadcaster of the Year Bob Zenotti of Swiss Radio International. None of the BoD members nor staff were able to get to California for the convention, hence no seminars on FM-TV. Bidders for the 1981 convention include Thunder Bay, Ontario, and St. Louis. Our condolences go to SPERDX, whose managing editor, Oliver Ellsworth, died recently."

Well, that about does it for this month. Oklahoma City '81? A capital idea! See y'all next month.....73.....jx

wtfda newswire...

Morris S. Goldman WA9RAQ
5815 North Christiana Ave.
Chicago, IL 60659

WTFDA NEWSWIRE APPEARS on an as-needed basis. While I scan many news sources for information of interest to WTFDAers, your news is needed! When you spot an item in your local newspaper that's DX newsworthy, clip it and send it on. Other WTFDAers can then benefit from your keen eye for news. News of new stations should go to the FCC news editors.

NEW TV TRENDS FOR '81... There are changes occurring in set design for '81. More sets are being offered with SAW filter i-f circuitry. In theory this should mean that selectivity is getting better, but as always, if you're considering a new set for DXing, give it a well rounded test. A SAW filter i-f will assure you of less i-f detuning as the set ages, and fewer components to fail...The hottest new feature is another type of filter, called a comb filter. This new component is installed in the luminance circuit of color receivers and is said to increase picture resolution by 25%. Because it is not in the i-f circuit, it has no effect on selectivity. Within 1-2 years, comb filters will be a feature of the majority of "quality" color sets, while about a third may feature SAW filters...Other strong trends include sound circuits with improved fidelity, a lowering of the cost (and an increasing use) of digital channel tuning. Some high end TV sets are being offered with added channels for convenient hook-up to CATV systems...On the monochrome scene, several manufacturers have introduced very compact TV receivers. Inspired by the now discontinued Sinclair receiver, the new receivers seem to offer better performance and battery life at somewhat greater bulk.

NEW FM AUTOSOUND TRENDS...For '81 more manufacturers will be offering over-\$500 auto AM/FM/tape combos. There is a very strong trend toward digital tuning. FM sensitivity, selectivity and resistance to overloading all appear to be improving. Other refinements include automatic blend circuits to reduce noise on stereo signals and automatic noise blankers to foil ignition noise. Pioneer, famous among FM-DXers for their Supertuner series, has begun a Supertuner II series with built-in "PNS noise suppression." Other specs were unavailable. Most autosound manufacturers are beginning to offer radios that will fit into the tiny openings in GM's new X-body cars. Of this group, the most impressive is the Kenwood KRC-411. Weighing in at over \$300 list, the KRC-411 is an AM/FM/cassette with digital readout of frequency and time, and five AM and five FM presets. There is little doubt that the new Kenwood unit will be superior to the disappointing Delco AM/FM/FM stereo radio offered by GM. Unfortunately, I discovered this the hard way. When I ordered my Buick Skylark, there were no "quality" aftermarket radios available, so instead of waiting I ordered a Delco. While FM sensitivity is not bad, it cannot begin to compare with the Bendix radio in my old 7 year old Cougar. It is apparent that the capture ratio is very poor. Multipath distortion is much more prevalent. The number of button presets is a total of 5 for AM and FM, whereas 10 was an industry standard for factory radios. Another aside, the cassette deck (which is a separate under dash unit fed into the radio) has an awful S/N ratio--probably about 35 or 40 dB. In short, if you're considering an X body, consider an aftermarket radio. In fairness to GM, I should say that the AM portion seems quite good. A good combo might be a GM AM in-dash unit with a Pioneer under-dash FM Supertuner.

UNDERDASH TV SOUND CONVERTER AVAILABLE...Kraco has introduced an under-dash converter to bring TV sound to your FM car radio. No other details yet available, but it might be just the thing for avid TV-DXers who do a lot of driving.

TWENTY HOURS ON ONE VCR? THE DECK IS STACKED...Just in case you want to record the entire broadcast day of a local or ten straight movies, Sony will soon be offering a 4 cassette stack loader for use with their SL-5400, SL-5600 and SL-5800 Betamax VCRs. At the recent Consumer Electronics Show, I had an opportunity to see the AG-300 "Auto-changer" in action. This amazing baby robot is microprocessor controlled, with three motors for motivation. In less than 15 seconds, the AG-300 withdraws the recorded cassette and pops in a fresh blank. The unit can be programmed for recording 4 events over a 2-week period. The AG-300 is expected to sell this fall for under \$200.

PANASONIC DEVELOPS NEW GENERATION UHF TUNER...Broadcasting magazine reports that Panasonic has developed a "high-performance (HPF) tuner that is said to surpass existing tuners by wide margins in noise and other performance measurements." We hope to have more next month.

TOSHIBA SHOWS TWO CHANNEL VCR...Probably around spring, Toshiba plans to intro its long awaited LVR (longitudinal video recorder) to the industrial market. One of the two units recently shown permits recording two video inputs and two audio inputs simultaneously. Two DX channels could be recorded at once...an interesting concept. Both units employ a fixed head 800 track design that holds the promise of design simplicity and low cost.

6 CONSIDERING A SATELLITE earth station? Better read the next WTFDA NEWSWIRE first! 73,Morris

IN SEARCH OF PSB

Donald L. Blevins
1715 Earhart Road
Baltimore, MD 21221
phone# 301-574-2714

IN SEARCH OF PSB..... This month's feature will recap the vacation Tom Yingling and I were enjoying after attending after the convention. The odda area traveled will expose a seven state area for DX information. Keep in mind I am only recapping a few bits of information; the list is in no way complete. Should you have anything to add I would most certainly would appreciate any additional data.

Turnpike Information

Pennsylvania: 159.045 159.075 New York 453.425/453.525
Indiana: 154.755 155.415 Maryland 151.04
Ohio: 155.685 155.79
West Virginia: 155.43

Indiana, like some other states, operates a great number of police networks on basically the same frequency. In the case of Indiana, that frequency is 155.13. Equipped with this frequency, a great number of agencies can be monitored. Illinois, Indiana, Ohio and Missouri operate point to point networks on 155.37.

Larger metropolitan areas are an exception, as outlined below:

South Bend Police 453.65 453.75
Mishawaka Police 453.525
South Bend Fire 154.19
Laporte Sheriff's Office 155.01

Missouri has a common police frequency of 155.73 with exceptions being those counties and police around metropolitan areas. Also note that Missouri also maintains a statewide hospital/ambulance network on 155.34.

Saint Louis County 155.565

Camped at Leavenworth, Indiana I observed:

Jefferson County, Kentucky 155.58
New Albany, Indiana 155.01
Jasper, Indiana 155.13
Evansville, IN 155.13
Friends Lake PD 155.13
New Albany, IN PD 154.19

Maryland State Police Hagerstown, MD 39.34

Till nexttime folks.....

Don
Don



FM NEWS

Bruce F. Elving, Editor
4515 Avenue "E"
Kearney NE (note: Nebraska is no longer abbreviated)
NB — only New Brunswick, Canada is "NB"! 68847

102-1

October, 1990

NEW FM STATIONS, TRANSLATORS GRANTED

AL Birmingham "91.1 1350 h.v.; 447' g; SE White C.
AK Craig K261AA "100.1 1.5 k; (KRBD) 96.9
Kendallville AK translator, P, 10 watts
AK Sika 104.7 11600 h.v.; 570'
AK Tot K261AP 100.1, 1.5 k; (KJMP-FM 100.9 North
Pole AK translator), 10 watts
AZ Big Park Valley, Village of Oak Creek, Jackson
County, Valley Vista Station (none of which are
on any of my maps, and geographical coordinates
not supplied, so I cannot say where these places
are) K257AV 98.3 k, r (KOOL 94.5 Phoenix)
K276AZ 103.1 k, m (KOYT 101.5)
K288AP 105.5 k, m (KNEO-FM 98.5)
AZ Snowflake, Show Low, etc. K211AH "98.1 k, j;
KMCB "91.5 Phoenix, P
CA Alhambra K288BG 101.7, 1.5 k; (KVIP-FM 98.1
Redding CA translator) (Angelus), P
CA China Lake K201AD "88.1 k, c; (KJSC 91.5 Los /
K204AM "98.7 k, c; (KVCB 91.9 San Bernardino)
K221AS k, m (KTOT 101.7 Big Bear Lake CA)
CA Happy Camp K276AV 103.1 k, m (KBOY-FM
95.5 Modesto OR translator), 10 watts
CA La Jolla K251A 102.9 k, m, 10 watt booster
CA Laguna Beach K268AA "98.1 k, j; (KSBP Mission
Vieja CA), P
CA Marysville K210AA "88.5 k, c; (KCHO 91.1 Chico)
CA Palm Springs K248AU 87.7 k, c; (KRCN 103.1
Indio CA translator)
CA Pioneer K278BA 103.1 k, m (KNGT 94.3 Jackson)
CA Pleasanton K251A 94.5 k, p, 10 watt booster
CA Red Bluff K218AC "91.5 k, c; (KCHO 91.1 Chico)
CA Redding K214AA "98.7 k, c; (KCHO)
CA Santa Cruz K252AG 82.7 k, g; (KRAM 100.9 San
Francisco), 1 watt
CA Trinity Center (40-56-39; 123-43-44) K268AA
100.9 k, m (KTMT Modesto, 93.7), 1 watt, 1
CA Watsonville K276AX 103.1 k, g; (KAMS 101.5
Merced CA), 1 watt, DA, 357'
CO Craig 102.5 10000; 1200'; rock
CO New Castle K237AD 98.3 k, m; (KMTS 92.7
Bismarck Springs), 1
CO Nucle K257AT 98.3 k, m; (KUCB-FM 94.1 Montrose)
CO Poudre K267AU 98.3
CO Uravan K276AY k, m; (KSPF 100.3 Salt Lake City
Utah's first Colorado translator)
K268AN 104.9 KUCB-FM 94.1 Montrose CO, m;
K298BN 107.1 k, m; (KREX-FM 92.3 Grand
Junction CO), 1 watt
FL Aven Park 100.3 3000 h.v.; 170'; m
GA Savannah "91.1 10000 h.v.; 1000'; GA Public R.
IL Champaign "91.7 20000 h.v.; 450'; g; IL Bille Inst.
MA Provincetown "91.8 1000 h.v.; 155'; "Lower Cape"
MN Austin "91.3 130 h.v.; 130' Scholes-KAVT(TV)
MN Rochester K280BF 103.9 k, g; (KROC-FM 100.9
Rochester in-city translator), The Source network
MT Thompson Falls K280BE 103.9 k; (47-53-30;
115-21-38), k; (KXLY-FM 98.8 Spokane WA), C
MT Toole County K288AK 101.7 k, m; (KOOZ 106.3
Great Falls MT)
NV Henderson K221AR k, r; (KKCB 97.3 Carson City)
NV Indian Springs K288AE 104.9 k, g; (KILA 95.5
Henderson NV)
NV Pioche K288AT 104.9 k, g; (KILA 95.5 Henderson)
NV Rhyolite K288AD 104.9 k, g; (KILA 95.5 Henderson)
NH Concord "98.1 50000 h.v.; 24'; Public Radio
NY New York "90.3 40000; 200'; CNY — a ridiculous
grant (Jaco), 8
NY Westtown W285AD 104.9 k, g; (WMBW 102.9 Syr/
NY Westtown (near Rochester) W228AE 93.5 k, g
ND Bismarck "90.5 10000 h.v.; 1250'; Public TV
OH Lima "90.7 50000 h.v.; 420'; Toledo Ed. TV
OH Shelby 100.1 3000 h.v.; 300'
OR Bend K244AL 98.7 k; (KPQD-FM 93.7 Portland)
OR Prineville K288BD 103.9
OR Redmond K249AT 97.7
SD Platte K214AA "98.7 k; g; (KDCN 88.5 Sioux Center
SD Yankton 100.3 30000 h.v.; 250'; m
TN Kingsport W217AB "91.3 g; (WMBW 98.9 Chattanooga)
TX Corpus Christi "90.3 100000 h.v.; 245'; Ed. Council
TX Eldorado K272AS 102.3 k; (KRCT 94.3 Ozama)
TX Round Rock "98.1 700; 53'; g; Izzy Production

TX Seymour 94.3 3000 h.v.; 110'
UT Delta K201AA "98.1 k, c; (KUER
"90.1 Salt Lake City), P — all KUER
translators have 10 watts
UT Laketown K216AA "91.1 (KUER)
UT Milford K202AC "88.3 (KUER)
UT Moab K218AA "81.5 (KUER)
UT Monticello K216AB "91.1 (KUER)
K285AM k, k; (KRSJ 100.5 Doreago
CO), 1
UT Orangetown K282AD "88.3 (KUER)
UT Price K204AC "88.7 (KUER)
UT Randolph K201AB "88.1 (KUER)
UT Rural Wayne County (transmitter
Monroe UT) K202AA "88.3 (KUER)
UT Telluride K202AB "88.3 (KUER)
UT Tropic K218AC "91.1 (KUER)
UT Vernal K218AB "81.5 (KUER)
UT Burlington "107.9 56000 h.v.; 2400';
Vermont Public Radio
VA Suffolk 106.9 100000 h.v.; 985'
WA Aberdeen K205AB "88.9 k; (KAOB
98.3 Olympia WA), 10 watts
WA McClary K201AC "88.1 (KAOB)
WA Pateros K215AA "90.9 k, g; (KMBI-
FM 107.9 Spokane WA), U
WA Quetta K208AC "88.7 (KAOB)
WA Raymond K208AD "88.7
WI Marshfield W261AF 100.1 k, g
(WWIB Ladysmith WI), U
WI Sheboygan W268AD 101.7 k, g; (WVVC
107.7 Milwaukee), U
WY Lusk K276AW 103.1 k, k; (KERM
98.3 Torrington WY), A
PR Anasco "90.3 14700 h.v.; 29'; g; Camero
Collegial
The Canada news which follows is
mainly from Walter Patton, 6252
Drolet St., Montreal PQ H2S 2S7,
CANADA. Walter reads the CANADA
GAZETTE at his library and was
kind enough to update us on the
latest in Canadian happenings. I
hope his contributions will be a
regular feature of this column.
AT Abitama (85 mi. N. Edmonton)
CKUAFM— "98.3 11 watts
AT Edson (116 mi. W. Edmonton) CKUA-
FM— "103.7 11 watts
AT Fort McMurray CKUAFM— "98.7 10
AT Hinton CKUAFM— "98.3 16 watts
AT Sun Hill (110 mi. N. Edmonton)
91.5 88 k; CBC, CBZ relay
AT Whitecourt CKUAFM— "107.1 17 w
BC Cedarville 98.7 k, c; CFTK Terrace
relay as is:
BC Dorrance 96.1 2 w
BC Harrison Hot Springs 95.7 90 w,
CBZ relay, 10 m; NE Chilliwack BC
BC Kitselas (Kitsilano) 93.3 15, CFTK
BC Kitwano 92.1 k, m, CFTK relay
BC Kitwano 94.3 k, m
BC Kelowna (40 m; E. Fredericton)
92.3 836 w, CBZ relay
BC Bon Accord (60 m; N.) 103.3
22300, CBZ
BC Campbellton 88.1 36000 CBZ relay
NB Doaktown (50 m; E. Fredericton)
96.5 86 w, CBZ relay
NB Edmundston (10 m; E. Fort Kent
NB) 100.3 22300, CBZ-French relay
NB Fredericton-Saint John 91.3 100,
000 — CBZ relay

SA Meadow Lake (30 m; N. Green Lake)
94.1 21000 — CBZ relay
SA Montreal Lake (80 m; E. Green Lake)
93.3 204 watts, CBZ relay
SA Patuamuk (25 m; NME Ile a la Croix)
105.5 82 watts, CBZ relay

FACILITIES CHANGES

AL Jacksonville "91.9 3003 h.v./ 145'
AL Tuscaloosa WJAL "91.5 480' (100000)
AK Anchorage KGLV 103.9 71' (2800 h)
AK Homer KGLT 103.5 100000 h (no v); 1150'
AR Dumas K100-FM 107.1 (not 103.9 and 97.7
as shown in the FM Atlas)
CA Alhambra K100 104.5 5600 h.v./ 1400'
CA Los Banos KJRS-FM 104.7 (from 95.9) 50000
h.v.; 470' ON AIR ON 104.71
CA Pacific Grove KAZU "90.3 4800 h.v./ 340'
CA Pismo Beach KSPB "91.9 (from 91.5) 115,
470'.
CA Santa Monica KCMN "90.9 6900 h.v./ 1110'
CA Sausalito KQBS 107.1 910 h.v. (570')
CA Ukiah K285AQ 104.9 (from K298BE 107.1)
CA Ukiah K252AM 98.3 (from K2928B 106.3)
CO Poudre KVMF "90.9 510 h.v.; 170'
CT Hamden WICI "91.3 10000 h.v. (870'),
presumably deleting directional antenna
CT New Britain WJBR 100.5 24500 h.v. DA (720')
FL Fort Myers WJBF-FM 96.9 100000 h.v.; 830'
FL Jensen Beach WJLF 107.1 285' (3000 h.v.)
FL Milton WJBF "88.1 vertical
FL Palatka WJTD 99.9 50000 h.v.; 180', reduc-
ing facilities as no net to cover Jacksonville.
FL Tallahassee WJLF 94.9 25000 h.v.; 490'
GA Brunswick WJBI 100.7 80000 (h) [175']
GA Savannah WJCL "88.5 1500 h.v.; 145'
GA Warner Robins WJBN 101.7 2500 h.v.; 350'
IL Carol WJOL 97.3 50000 h.v.; 195'
IL Chicago WJPK "88.3 DA to the west
IL Decatur WJLM "91.3 700' (7000 h.v.)
IL Columbia City WJBT 106.3 3000 h.v./ 300'
IN Indianapolis WJBT "91.5 130 h.v./ 100'
IN Pendleton WJBN "91.7 1200 h.v.; 155'
IN Terra Haute WJSD "90.7 25000 h.v., 130'—
reduces coverage, drops vertical
IA Council Bluffs WJBR "89.7 DA toward Iowa,
with null toward Vancillan SM
KQKQ 98.5 510' (100000 h.v.)
KS Wichita KJHR "89.1 v confirmed—but side-
mounting gives poor v coverage in many
directions, says their engineer.
KY Paducah KRYO 93.3 89000 h.v.; 300'
LA New Orleans WJOL "90.7 19000 h.v.; 280'
NE Brunswick KJKA-FM 98.9 50000 h.v./ 500'
NE Portland WJCS 97.9 no Dolby
NE Presque Isle WJBN "105.1 100000 h.v. (1080')
NE Springfield WJOS 105.1 (supposed to move to
106.7) 50000 h.v.; 2420'; The Source network
NA Taunton WJBL 93.3 30000 h.v. (340'), adds
dual city, Providence RI to ID; drops SCA
NH Hanover WJSD "89.7 (from 90.5) 30000 h.v.; 175'
NH Moorhead KJCL "91.1 100000 h.v.; 640'
NH St. Louis WJLF-FM 92.3 910' (97000 h.v.)
KJLM 107.7 450' (100000 h.v.)
NH Haverhill WJEC "91.7 120 h.v.; 120'
NY Buffalo WJBF "89.7 24000 h.v. DA (240')
NY Carling WJLF-FM 103.1 40000 h.v.; 530'

NY Fredonia WJCF "88.9 130 h.v.; 115'
NY Ithaca WJBR 93.5 3000 h.v.; 300'
NY Mount Kisco WJVF-FM 106.5 1400 h.v./ 440'
NY New York WJLF 95.5 2200 h.v. (1300')
WJEN-FM 102.7 3600 h.v.; 1420'
NY Rochester WJCF 96.5 450' (20000 h.v.)
NY Utica WJLF-FM 107.3 50000 h.v.; 500'
NC Charlotte WFAX "90.7 240' (100000 h.v.)
NC Fayetteville WFSS "89.1 (from 88.1)
100000 h.v.; 350'
NC Greensboro WJMA "90.1 (from 90.5) 10000
h.v.; 470'
NC Rutherford WJBF-FM 95.3 300' (3000 h.v.)
OH Bainbridge WJBR "88.3 100 h.v.; 240'
OH Berea WJBC "88.3 140 h.v.; 36' (never
having changed to 1450 watts from 10 w)
OH Fairfield WJYS 94.9 27000 h.v.; 640'
OH Eugene KJCC "89.7 30000 h.v.; 750'
PA Hanover W296AB 107.1 (from W228AB 93.5)
PA Hershey WJTF-FM "89.5 5900 h.v. (1360')
PA Lewisburg WJBU "90.5 11000 h.v.; 150'
PA Philadelphia WJBR 93.3 29000 h.v. (570')
PA Swarthmore WJRN "91.5 110 h.v.; 140'
RI Smithfield WJMF "88.7 (from 91.5) 225
h.v.; 130'
SC Darlington WJBR-FM 105.5 280' (3000 h.v.)
SD Sioux Falls KJUR "89.3 300; 115' [(91.5)
TN Elizabethton W202AC "88.3 (from W218AA/
TN Gallatin WJCF "88.3 1000 h.v.; 390'
TN Greeneville W218AB "91.5 (as W202AB 88.3)
TN Lebanon WJBR-FM 107.3 100000 h.v.; 730'
TN Oak Ridge WJUU 94.3 1800 h.v.; 380'
TN Red Bank WJBN 94.3 2800 h.v.; 323'
TX Dalhart KJLI-FM 95.9 3000 (h) (170')
TX Houston KTRU "91.7 650 h.v.; 160'
KJKA-FM 95.7 100000 h.v. (700')
TX Ozona KJRT 94.3 1500 h.v.; 300'
TX Vernon WJBC-FM 102.3 730 (h); 140',
reduces coverage
UT Richfield K278AT 103.1 (from K288AC 105.5)
VA Buena Vista 96.7 3000 h.v.; 275 v; 290'
VA Norfolk WJSD "91.1 920 h (drops v) (195')
VA Richmond WJBL 102.1 adds vertical
VA Olympia KADS "89.3 1900 h.v.; 19'
VA Antigo WJLO 105.3 400' (100000 h.v.)
VA Sparta WJCN-FM 97.1 50000 h.v.; 610'
WI Superior (transmitter Duluth MN) K210
102.5 100000 h.v.; 600'
PR Aguadilla WJVA 100.3 38000 h.v.; 1000'
PR Boston Bar 106.1 (from 98.9)
DU Toronto CND-FM 99.1 47900 h.v. (860')
PC La Malbaie CND-FM 92.9 820 h.v. (233')
AL Birmingham KZZK 104.7 FM-105
AL Tuscaloosa WJDA 95.7 UDA-FM (strict)
AR Little Rock KNTK 103.7 K-Rick
AR Jonesboro KJTM-FM 101.9 FM-102
KJFM 107.9 K-Fine
CA Glendale KJTE 101.9 Cuts-102
CA Santa Monica KSRF 103.1 K-Surf
CT Hartford WJCF-FM 102.9 8-103
FL Boynton Beach WJBS "91.7 Stereo-91
FL Key West WJFM 92.5 Y-92
IL Chicago WJEF 99.5 W-FM
IL Harrisburg WJBO-FM 99.9 Rock-100
IL Pontiac WJPK-FM 103.1 K-103

IN Bedford WJBF 105.5 F-105, strict
IN Fort Wayne WJCL "90.3 FM-90
IN Lafayette WJUS 93.5 (from 92.7)
US-93 (not rock-93)
IA Clinton KJAY 96.1 FM-96 [Rock-97
KS Topeka WJBF-FM 97.3 FM-97, not /
KY Paducah WJYQ 93.3 The Q
ME Brewer WJUF-FM 100.9 Y-101
MI Alpena WJSD 107.7 Stereo-108
MI Charlevoix (adds Petoskey dual-city
(D) WJHO 105.9 106-KHQ
MI Jackson WJBF 94.1 I-94
MI Traverse City WJCF-FM 92.1 FM-92
MS Holly Springs WJRA-FM 92.7 K-92
(strict)
MS Senatobia WJLC "90.1 FM-90
MS Starkville WJBR 92.1 92-KOR
MO Kansas City KJBC 104.3 104-FM
MO Moberly KJES 104.7 Stereo 104-Kres
MO Humboldt City KJRK 94.1 FM-94
NY Albany WJSH 106.5 WJah-105
OH Dayton WJBF-FM 99.3 FM-93
OH Fairfield WJYS 94.9 Yea-95 (strict)
OH Kettering WJUG 99.9 900-Rock
OR Albany KJRT-FM 99.9 Cricket
KJPE 107.9 K-Happy
PA Elizabethton WJRK 106.9 Z-107
SC Spartanburg WJBF-FM 96.9 FM-99
TN Camden WJBR 98.3 Super 98
TN Covington WJBL-FM 93.5 FM-93
TN Hendersonville WJYQ 92.1 92-Q (strict)
TN Jackson WJBR 103.1 J-103 (fairly p)
WJIR 104.1 Rock-104 (strict)
TN Memphis WJBN-FM "91.1 FM-91
USMS "91.7 Super-92
TN Oak Ridge-Knoxville WJRI 100.3
Stereo-100
TN Savannah WJBF-FM 101.7 FM-102
TN Waverly WJRY FM-105
TX Lubbock KSEL-FM 93.7 Rock 93
TX Odessa KJBP 96.9 Super Q
NB Winnipeg CHIQ 94.3 Q-94 (strict)
ON Brampton CFMY 102.1 MYFM
PG Quebec CND 98.1 Chloé ("Choice")
PQ Verdun CND 96.9 C'est Quoi ("What
is it?")
STEREO OR SOON TO BE STEREO
CA Palm Springs 100.7
GA Greensboro WJBR 103.9 K-104
IL Princeton WJCF-FM 98.3
IL Rock Island WJRK 90.1
IN Alexandria WJAT 96.7 k
IN Frankfort WJLF-FM 99.7, rock
IA Estherville KJLR-FM 95.9, rock
KY Lebanon WJLS 100.9
LA Baton Rouge WJLF 92.1
LA New Roads KJRM-FM 106.3
MO Cumberland WJGO 106.1
MI Houghton WJUN 97.7, Y, Stereo-98
MI Kalamazoo WJLF 97.7, rock
MN Little Falls WJYQ 92.1 m, Mutual,
Q-92, "The Spirit of Central MN."
MS Lake WJTB 104.9, FM-105
MO Malden KJBL 92.7, rd
MT Helena WJBL-FM 92.1
NE Kearney WJBF "91.3 nos with true
S, Y-91 (strict)

NY Brockport WBSU *88.9 (heard testing)
 NY Seneca Falls WFSM-FM 99.3
 TN Savannah WKXW 93.5 rock, K-93
 OH Dayton WGMW *88.1 g, not garbled stereo
 OH Bryan WENO 100.9, not rock
 LA Lorton *88.1, g
 WI Hayward WISM-FM 101.7, Mutual
 MI Sturgeon Bay WDOF-FM 93.9, k
 WI Waukesha WMLL 106.1
 NF Antigua CPOZ 100.3
 NF Bonaville CJQZ 92.1
 NF Corner Brook CKOZ 92.3
 NF Marystown (heard announcing as "Fortune") CIOZ 96.3
 NF Rattling Brook CHOS 95.9
 NF Red Rocks CKSS 96.9 (calls changed from CKOZ)
 NF Stephenville CIOZ 98.5 (calls changed from CPOZ)

NO STEREO ANY MORE

MS Booneville WBIF-FM 99.3

SCA--67 kHz

AL Florence WQLT 107.3 music
 CO Fort Collins KOOL-FM 107.9 +X
 FL Miami WMCU *89.7 +X
 GA Atlanta WABE *90.5 talking book
 IL Litchfield WSMI-FM 106.1 adds SCA
 IN Elkhart WFRN 104.7 adds SCA
 IA Burlington KERS 107.3 +X (from ABC)
 IA Pella KPLP 103.3 +X
 KS Dodge City KDCR 95.5 +X
 KY Hopkinsville WKGA-FM 100.3 adds SCA
 KY Louisville WFLP *89.3 adds SCA
 LA Shreveport KROK 94.5 adds SCA
 MN Fairmont KFMC 106.5 +X
 MN Minneapolis WCCO-FM 102.9 +X parttime
 MN New Ulm KXLU-FM 93.7 adds SCA
 NE Scottsbluff WKOR 92.9 +X
 NH Mount Washington WHOM 94.9 adds SCA
 NJ South Orange WSOU *89.5 adds SCA
 NY Newburgh WFMN 103.1 adds SCA
 NY New York WNYC *91.5 adds SCA
 OH Cleveland WCLV 95.5 no ethnic SCA--
 remove SCA listing
 OH Dayton WDAQ 107.7 +FX (fare news, X)
 SC Beaufort WULJ-FM *89.9 +TB
 TX El Paso KTEP *88.5 adds SCA
 WA Seattle KMGH *89.5 no SCA
 WA Tacoma KNOB 97.3 no SCA
 WA Yakima KITT-FM 94.5 music
 PR Guayama WJRF-FM 105.9 adds SCA, 41
 and 67 kHz; parttime stereo
 PR San Juan WIPR-FM *91.3 adds SCA
 AT Edmonton CKUA-FM *94.9 and Peace River
 CKUA-FM *96.9 add experimental SCA
 BC Vancouver CPOX 99.3
 CHOM-FM 103.5 music

FORMATS/NETWORKS

AL Hayleyville WJBB-FM 92.7 rock
 AR Paragould KHG 104.9 rock
 CA Los Angeles KMX-FM 93.1 rock
 CA San Bernardino KOLA 99.9 pr
 CA San Clemente KIVE 107.9 rock
 CA San Fernando KGBL-FM 94.3 +big bands
 CT Hartford WDRB-FM 102.9 rock
 IL Wilmington WLBZ 105.5, + ON AIR!

SA Macan WCRY 107.9 NBC

IL Carol WBLU 97.3 k, stereo-97
 IL Fairfield WFIH-FM 104.9, km
 IL Pekin WKQA 104.9 rock (from k)
 IL Wheaton WETN *88.1 g, not 250 e DA
 IN Winchester WZZY 98.3 EZ-98.3, carries
 Mutual, Larry King show nights
 IA Davenport KALA *88.5 Jr
 IA Marshalltown KJJB-FM 101.1 m
 KS Arkansas City KBUZ 106.5 rock
 ME Farmington WKTJ-FM 99.3 rk
 ME Gardiner WABK-FM 104.3 ABC-information
 ME Machias WALE 95.3 m, The Source
 ME Sanford WSMF-FM 92.1 The Source net.
 ME Millinocket WKTR 97.7 k, CBS
 MA Greenfield WMAI-FM 98.3 m
 MA Orleans WKZE-FM 104.7 KZ-104, rock
 MI Alton WFCF-FM 104.9 m
 MI Ann Arbor WCBN *88.3 c (not re)
 MI Grand Rapids WCGS *91.3 S (from U)
 MI Hancock WHPF-FM 93.5 all talk
 MI Hillsdale WCSR-FM 92.1 m
 MI Lansing WJLM-FM 97.5 m (not rock)
 MN Bemidji KBHP 101.1 r, KB-101 (strict)
 MN Brainerd WJJY 106.7 rock
 MN Crookston WOKZ 97.3 S, *97-FM
 MN Eveleth WVEF-FM 100.1 rock
 MN Golden Valley WGRS-FM 92.5 The Source
 MN Hibbing WDFG-FM 106.3 m
 MN Virginia WMLB-FM 107.1 r, FM-107 (occ.)
 MN Window WDOM-FM 94.3 k
 MS Corinth WALP *90.5 rock
 MS Greenville WOMS 100.7 or
 MS New Albany WOKM 103.5 hr
 MS West Point WQBB 100.9 rock
 MO Poplar Bluff KPBB 94.5 m
 KJEZ 95.5 r, 2-95
 MO St. Louis KSD-FM 93.7 rock, KS-94
 NE North Platte KODY-FM 94.9 C (see N)
 KELA 97.1 r (not kr)
 NY Buffalo WACJ 104.1 Mutual
 NY Hyde Park WJJB 97.7 r, JLB-98 (strict)
 NY Liberty WVOG-FM 95.9 m (not re)
 NY New York WRTU 92.3 so--no jazz
 WPIX-FM 101.9 r, "The New 102"
 NH Exeter WKOR-FM 107.1 rock
 NY Woodstock WOST 100.1 m
 ND Fargo WDAY-FM 93.7 Mutual (from N)
 OH Columbus WRRS 99.7 m (from d); 3-100
 OH Van Wert WERT-FM 96.9 rock
 OH Westerville WBBY 103.9 all jazz
 OH Eugene WKUH-FM 97.9 CBS
 PA Pittsburgh WPEZ 94.5 rock
 TN Brownsville WTBG 95.3 k
 TN Memphis WQUD 104.5 m
 TN Milan WKBZ-FM 92.3 m
 TN Murfreesboro WMOI *89.5 P (not Pt)
 TN Olivehill WDMX *89.1 g
 TX Wichita Falls KLUR 99.9 gk
 WA Richland KJOK 94.9 The Source
 WA Yakima KFFM 107.3
 WV Romney WJGF *91.5 rock
 WI La Crosse WSPR 95.9 m (from p)
 WI Stevens Point WSPY 97.9 The Source
 WI Casper KAMY 94.5 country (k)
 ON Burlington CING 107.9 rock & ethnic
 SA Green Lake CHZL 94.9 ethnic

DELETION

MH Benlin WXLQ 103.7, but applications

on file for this channel by other would-be
 broadcasters; FCC may grant interim
 operation to one of them

CALL LETTERS ASSIGNED

AK Prudhoe Bay 100.1 KZ61AD (not K261AH)
 AZ Cottonwood 95.9 KCRJ-FM
 AZ Flagstaff *88.5 KHAU (from KAXR)
 CA Santa Maria 102.5 KSMI-FM (KSMH-FM)
 CA Sonoma *91.5 KTUD (applies for 93.5)
 DE Rehoboth Beach 92.7 WQMD (WLRB), m
 FL Big Pine Key 93.5 WBUS
 FL Dunedin 102.3 WTRP-FM (WTRF-FM)
 FL Jacksonville 96.9 WAIY-FM (WAIY)
 GA Dawson 92.1 WHIA (WQUD-FM)
 HI Honolulu 93.9 KHIA (KPIG)
 ID Sandpoint 95.3 KPRD, stereo, rj
 IL Macomb 103.1 WJED
 IN Brazil 97.7 WBOJ-FM (WBOH-FM)
 LA Marksville 97.7 KMLB (KAPB-FM)
 LA Lewiston 93.9 WATU (WCOU-FM), FM-94
 MI Detroit 90.7 WLLZ (WDFG) p (mas g)
 MS Prentiss 96.3 WJDR
 MT Belgrade 96.7 KMKZ (KQVM-FM)
 UT Sidney 93.1 KQSP-FM
 NJ Vineland 92.1 WKOY (WVFL-FM)
 NC Dallas 91.7 WSGE
 NC Whiteville 99.1 WQTR (WENG-FM)
 OK Claremore *91.3 KNGX
 OK Okemah 106.1 KONA
 OR Astoria 92.9 KAST-FM
 OR Tillamook 104.1 KTLI-FM
 OR Toledo 107.1 KCEI
 PA Philadelphia 107.1 BEAZ (WQVR)
 TX Houston 96.5 KSRB (KALM); rk
 TX Victoria 107.9 KZEX
 UT Noola *88.1 KUUV
 PR Guayama *88.1 WCRP
 AT Edmonton 96.3 CKRM (not CKRA, as I
 heard it on ahp)
 ON London 99.3 CJBC-4 (from CJBC-20)
 SA Uranus City 105.1 CBDB

ABBREVIATIONS USED THIS COLUMN

§ is stereo, h is horizontal effective
 radiated power in watts, v vertical watts,
 + is SCA with X meaning teletype/printer
 noise, M music; c classical; d disco; e
 ethnic; g gospel, j jazz, k country; L is
 Latin/Spanish, m middle of the road or
 easy-listening, p progressive rock, r is
 all other types of rock, s soul, Networks:
 C Columbia Broadcasting System, M Mutual,
 R ABC, P National Public Radio, S is
 Associated Press Audio, U United Press
 Audio.

FM ATLAS CORRECTIONS--ERRATA

p. 14 maps add 100.1 WPMH to Plymouth MI
 p. 17 add city of Lawrence MA to maps.
 93.7 WCEY. p. 19 Kingston NY correct
 calls of 94.3 to WBPB. Add in seal
 print Brooklyn NY *90.9 WCRB. Lake Placid
 WPLM is on 105.5; delete reference to
 being on 95.3. p. 18 Elmira add 92.7 WLEZ.
 pp. 20-21: add to map: Mercersburg PA
 92.1 WRCV. Trenton (two maps) NJ 101.5:
 WJON (not WJNJ), p. 22: add heading:
 "Delaware, Maryland, Virginia."

FM Atlas Corrections, Continued

p. 25 add words "Atlantic Ocean" in the
 appropriate place.
 p. 26 Georgia under "Buford" write 102.3
 WSCD. Add calls to Adel 92.1 WDDQ.
 p. 28 Dumas AR change frequency to 107.1
 p. 27 Key West FL change WNCU to 91.7; also pp.
 66 and 90 in the Station Directories.
 p. 34 Lansing should be 97.5, not 95.7
 Berrien Springs should be *90.7, not 90.9.
 p. 35 write in "Sault Ste. Marie" in Ontario,
 above 100.5 CHAS.
 p. 37 put Lansing dot in IL, not IN.
 p. 37 IN Decatur 92.7 WMD, not WGR.
 IN Sullivan should be 95.3 WMD, not 106.3
 WSAK (note WSAK is in Sullivan IL)
 p. 21, New Jersey. Zephaph dot is misplaced:
 place dot above the "h" in Zephaph(final h).
 pp. 38-39 MI: Add Minnequa 95.9 WMMH west of
 Eagle River. Dots for Berlin and Ripon are
 reversed. Change call of Sheboygan *91.7 to
 WNSN (WNS is a daytime AM station there).
 p. 43 Maryville MO KNIM 99.3 (delete reference to
 being on 95.3)
 p. 48 Utah, Richfield--add translators:
 103.1 KSFH, 106.3 KISN, 107.1 KALLT
 Wanti KMKU 105.1 (not 105.5)
 p. 53 CA. Change town from Marlong to Johnston-
 ville.
 p. 54 WA. Correct spelling to "Puyallup"
 p. 54 Klamath Falls KAGD 99.5 (not 98.5); change
 directories accordingly, too.
 p. 56 Spokane WA, add *91.1 KPBX
 Station Directory, geographical:
 p. 65 San Rafael CA add 100.9 KTHM-FM p. 15-46
 add Santa Barbara 99.9 KTYO p. 32, 71 +TH
 p. 67 GA West Point WCMU 100.9 kg, V, 12, 40
 p. 69 KS Wichita secondary mileage 51; primary 17.
 p. 73 MT Billings KTYA 93.3, not 94.7
 p. 74 MN Clovis KTCM 99.1 S, r, C, 31, 75 miles
 p. 75 write in "NORTH DAKOTA" above Belcourt.
 p. 76 Fargo 97.9 KTHM-FM (not KFCB)
 add ON Middleton WPCF 105.9 S, r, UZ, 33, 72
 p. 81 VT Brattleboro second entry should read:
 m 96.7 WMLJ
 p. 81 WA correct town spelling to Puyallup
 p. 83 Winnipeg take note that CJMB 101.5 may be
 deleted; is off the air for sure.
 p. 84 Winton change frequency to 103.9; Waguec
 should be 97.9. Add heading over Charlottesville,
 "Prince Edward Island." Add Blanc Sablon PQ
 CBSI-21 107.1, 7, 27 miles.
 Station Directory, By-Frequency:
 p. 86 88.1 add IL Winnetka WMTW 10, U. Akron
 FM-88 is OH, not OK.
 88.7 add MI River Falls WRRS S 82 3000.
 p. 88 89.7 Florida, Miami WMCU (not WCRU)
 p. 90 91.7 add OK Stillwater KOSU S 400 100000, P
 [Thanks to many reporters for noting this
 omission!]
 p. 92 Remove RF Red Rocks 1120. Add:
 no 92.7: NY Garden City WJLN S 265 3000
 p. 93 93.5 add ON Peterborough-Cobourg CBPF 558,
 28400. 93.5 add PQ Ile de la Madeleine CBIM
 670; 4500. 93.5 add AR Monticello KRBH-FM S
 340; 2350.

READERS' REPORTS AND COMMENTS

93.7: add PQ Bala-Coneau CBMT 300
 3000. Change reference for Lac
 Megantic from PA to "PQ."
 p. 94 add to 94.1:
 IL Watske WGEA-FM S 140; 19000 E
 p. 95, 95.3 add:
 IA Independence KOUR-FM S 200 3000
 p. 96, 95.5 add:
 KY Prestonsburg WQOC-FM 530 100000
 p. 100, 99.1:
 NF St. Albans CBNS, not CBNSI
 ON Toronto capitalize CKO-FM2, 860*,
 not 360*. Remove explanation point
 after KMAF Fort Smith AR.
 p. 101, 99.7 remove PQ Bala-Coneau
 CBMT, etc.
 p. 102, 100.9 add:
 NY North Syracuse WEZG S 235, 3000
 p. 105, 102.7:
 NS Halifax add: CBH-FM S 711 100000
 p. 106, 103.7:
 WI Wausau-Wilkesville EZFM-104 add:
 WEZM S 820 19500
 p. 107, 105.3 change calls for ON
 Kitchener to CFCA.
 p. 109, 106.3 add:
 NJ Eatontown WHTO-FM S 200; 3000
 The above are only errors
 in the FM ATLAS, not new additions
 or stations changing their facilities
 as reported in the FCC-FM columns in
 the months since the book came out.
 Because of the rush to get the book
 to the printers more errors than
 usual occurred. Please be sure to
 notify of other errors that you may
 find.
 return postage (IRCs for U. S. readers!).
 The chief engineer of WRRS Baltimore told Hank Holbrook he's not sure when
 or if their Riverdale MD translator will operate; it is off the air.
 WCVJ *90.9 Jefferson OH back on the air, temporarily from 7 am to 7 pm,
 possibly until 11 p.m. now. Back on the air, too, is WEHD *89.9 Grand
 Rapids, still from Aquinas College, and against the college's wishes, who
 want the transmitter removed from college property.
 WV Public Radio stations will begin 24 hours' operation Oct. 6, and the
 stations will start giving individual IDs. Neil Zank asked about my listing
 for WSM-FM Sandersville GA; it is moving from 93.5 to 94.3. Paul Petosky
 sent an ad from WJLP-FM 92.3 (Lansing MI) thanking the FCC for renewing
 their license, after their former manager was found guilty of fraudulent
 billing practices. Paul is working on a book--a TV movie digest. WXLX-
 FM *91.5 Rochester NY now 24 hours. KUVC *90.9 Lincoln NE, KCBS 95.3
 Concordia KS both back to full power after recent storms. WCTS 100.3
 Minneapolis on reduced power after its tower went down. On a trip to
 Seattle Charles George found the FM ATLAS helpful as it listed several
 local translators, which he at first thought were images.
 Contributors: R. Baker, Humboldt IA; P. Boersma, Spring Lake MI; J. Brewer,
 Pontiac IL; D. Brumfield, Muncie IN; A. Chaw, WVIC-FM Hartford CT; S. Chmonek;
 J. Ciemer, Peoria IL; T. Cornell, Greenston IN; M. Danner, Waterville LA; J.
 Ebeling, Bloomington IN; E. Fader, Bayshore NY; M. Falt, Wiltoughby OH; M.
 Friend, Mosely VA; P. Gaines, Detroit MI; C. George, Dallas TX; E. Higgins,
 Riverside IL; G. Hauser, Knoxville TN; H. Holbrook, Chevy Chase MD; J. Jefferson,
 Pleasanton CA; M. Lemonakis, Baltimore MD; M. Lombardi, Atlanta GA; T.
 McVey, Bolivar IN. To be continued next month. (BB) Composer broke down while
 typing this column, but the standard 17-pitch Hercules seems to be doing well.

SPECIAL REPORT

FM AND TV IN FIVE EUROPEAN CITIES

by Ralph Strobel

Viennese FM - Kaiserhof Hotel

- About 90.1 - EZ rock songs in English, occasional MoR, also heard two LeRoy Anderson selections - The Typewriter Song and Bugler's Holiday.
- About 92.1 - All classical including orchestral works and opera. This station simulcast on AM band at all times. s/off 2330.
- About 95.1 - Talk programs in German.
- About 98.1 - Talk programs in German, occasional classical and EZ listening music in German. This station in unison with 95.1 at times.
- About 100.1 - Rock songs in English.
- About 102.1 - Rock songs in English, occasional country and EZ listening music in English, news and sports. This was the only station with English speaking DJ's. In fact, it sounded similar to any station here in the USA. It was announced that a French speaking program would be broadcast later in the day. News on the hour, given by both male and female announcers, was in unison on all six stations for five minutes. No ID's on the hour were given except for the above station which used "Blue Danube Radio." When I returned to my room at 2300, 90.1, 95.1 and 98.1 had signed off. 100.1 and 102.1 were on in unison. It was impossible to get exact frequencies, so have approximated. All FM stations heard 8/4-5/80. No TV set was in the room to examine.

Salzburg TV - Cottage Hotel

When I entered my room at the Cottage Hotel, I was delighted to find a Philips Color TV. At 1410, all stations were showing test patterns. Channel 2 (or 8), was playing classical music from the baroque period (1600-1750), while Channel 3's (or 9's) background music was English rock. Stations signed on about 1500 or a little later.

Test patterns were much more colorful in Austria than those we see here. Small vertical strips in many colors were at the top of the screen, while the bottom of the screen had small horizontal strips of color, all enclosed in a circle. On the left is a diagram of the channel selector. There were 12 channels in all on the set, but only five stations. The stations on the left (channels 1 through 6), are in unison with stations to the right (channels 7 through 12). Therefore, channel 1 and 7 in

unison, 2 and 8 in unison, etc. There was no channel 6 (or 12). I asked why stations were identical on the opposite channel and was told a station would sometimes broadcast a different program on their second channel.

ID's were given while a test pattern was shown. Channel 1 or 7 - ORF FS1, Channel 2 or 8 - ORF FS2, Channel 3 or 9 - DRP ZDF WENDELSTEIN, Channel 4 or 10 - DRP ZDF, Channel 5 or 11 - BR-MCHN 3. PROGRAMM. All stations signed off about 2300 or 0000. I was surprised at the limited hours these stations broadcast each day.

Salzburg FM

- About 91.1 - All classical and in unison with AM simulcast. s/off 2307.
- About 92.1 - Found after 91.1 s/off. Signal weak with classical music. Vienna?
- About 95.1 - German polkas, music of Austria, and classical.
- About 96.1 - EZ listening and talk.
- About 97.1 - English rock and jazz, occasional MoR in English and German polkas.
- About 98.1 - German polkas and English rock.
- About 99.5 - EZ listening and EZ rock in German and English, talk and jazz.
- About 101.1 - German polkas, music of Austria, talk and classical (20th century works).
- About 102.1 - A weak signal heard at night. Vienna?
- These stations heard 8/6-7/80. No English speaking station, but all similar to Vienna.

SPECIAL REPORT

OCTOBER 1980

Paris FM - Penta Hotel

- About 88.1 - Talk and French rock. s/off at 0000.
- About 91.1 - French and English rock, jazz, occasional classical and disco. This station was simulcast on the AM band, and was in unison with 88.1 at night with AM station off air. s/off 0000.
- About 94.1 - Mostly talk with occasional MoR songs in French, 20th century classical music and opera. s/off 0000.
- About 98.1 - All classical.
- About 100.1 - French and English rock, occasional progressive rock. s/off 0000.
- Again, all frequencies are approximate. No TV set in my room, but I did see one in a store. The set was tuned to channel 3 showing a test pattern at 1400. The test pattern was again very colorful, but different than Austria. Calls shown were TDF at top of screen and FR3 at bottom of screen. Eight channels were possible on French TV sets. All heard and seen 8/8-9/80.

London FM - Kennedy Hotel

I was hoping the broadcasting guide of the London Times would set me straight as to the exact frequency of each station, but I find myself confused. It seems that all stations are simulcast 100% of the time on the FM, AM, long wave, and medium wave bands. Here is what the London Times shows: WAVELENGTHS: Radio 1 medium wave 275m/1089kHz or 285m/1053kHz. Radio 2 med wave 330m/909kHz or 433m/693kHz and 88-91 VHF. Radio 3 med wave 247m/1215kHz and 90-92.5 VHF. Radio 4 long wave 1500m/200kHz and 92-95 VHF. Greater London area only: med wave 720kHz/417m. LBC 261m, 97.3 VHF, Capital 194m, 95.8 VHF. World Service: med wave 648kHz (463m). BBC Radio London 206m, 94.9 VHF. Here is what I found on the FM band in London:

- About 89.1 - Mostly progressive rock, occasional rock, disco, and country. I heard a documentary program regarding Elvis Presley. Elvis was interviewed in his early days of popularity. Many of his songs were then played.
- About 91.5 - Classical (opera), jazz (Chick Corea record), simulcast on AM band.
- About 94.1 - ID as Radio 4, VHF, educational talk programs, classical, and big bands.
- About 95.5 - ID as BBC Radio 2, sports (motorcycle races), country, rock, and MoR. This station in unison with 89.1 at night. Gospel on Sunday morning.
- About 96.5 - ID as Radio 1, Mostly disco, with occasional rock and Latin.
- About 98.1 - Mostly talk programs, such news, sports (cricket game). The frequencies from 99.1 through 103.1 were used for police calls.

London TV

I did have a Kinloch black and white TV in my room. There were four possible stations on the set, with three stations on the air. BBC-1, BBC-2, and ITV-1 were on the air. No station broadcasting on ITV-2. The London Times lists three TV stations. They are BBC-1, BBC-2, and Thames. BBC-1 and BBC-2 sign on at 0640 with sign off at 0010. Thames has a sign on at 0930 and sign off is 0025. Rather than saying sign off in England, it is referred to as close. All seen and heard 8/9-10/80.

Edinburgh FM

My final destination was Edinburgh, Scotland, where I attended the annual convention of the International Double Reed Society, an organization for oboe and bassoon players. The convention lasted four days, but I spent exactly one week there.

- About 88.5 - ID as Radio 1. Edinburgh Evening News lists: 1053 kHz, 285m, 1089 kHz, 275m, VHF: 88-91 MHz. Mostly jazz and rock with occasional country, MoR, and progressive rock.
- About 90.1 - ID as Radio 2. Listing: 693 kHz, 433m, 909 kHz, 330m, VHF: 88-91 MHz. Mostly jazz and rock, with occasional country, MoR, and progressive rock. In unison with 88.5 at night.
- About 92.1 - ID as Radio 3. Listing: 1215 kHz, 247m, VHF: 90-92 MHz. All classical and news. 2315 close.
- About 95.1 - ID as Radio 4, Open University. Listing: 810 kHz, 370m, VHF: 92-95 MHz. Mostly news and educational talk programs, with occasional rock and MoR. ID at 0800 was "You're listening to good morning, Scotland."
- At 96.8 - ID as Radio Forth. Listing: 1948 kHz, 194m, VHF: 96.8 MHz. Mostly rock, with occasional disco. On Sunday evening, classical music was heard. This was the only radio station I saw advertised. I first noticed a billboard at the train station with 194 meters and 96.8 VHF given as frequencies. All buses (double deckers) had large signs on them plugging Radio Forth. A few souvenirs brought back included a tee-shirt, sweatshirt, cup, and pen with big letters on each reading: Close To You 194 Radio Forth. The cup reads: 194 medium wave, 96-8 VHF STEREO.

Continued

SPECIAL REPORT

OCTOBER 1980

Radio Forth was certainly Edinburgh's most popular station, and the only station using a frequent non-ID of "194."

Once again, the frequencies of 99.1 through 103.1 were loaded with police calls coming in loud and clear. There was a great deal of unlawful activity on Friday and Saturday nights that was fun to listen to.

Edinburgh TV - Golf View Hotel

There was a nice TV set in the lounge of the hotel, where three channels were on the air. BBC-1 and BBC-2 both sign on at 0515 with a 0015 close. STV (Scotland TV) signs on at 0930 with a 0005 close. Here is a listing of evening TV programs from the August 13th edition of the Edinburgh Evening News:

STV	BBC-1	BBC-2
5.15 - Popeye.	5.5 - Newsround.	6.55 - Dallas.
5.20 - Crossroads.	5.10 - Grandad.	7.45 - News.
5.45 - News.	5.40 - News.	7.55 - Top Crown.
6.0 - Scotland Today	5.55 - Reporting	8.40 - Lost in the Stars :
News and High	Scotland.	Film.
Summer Extra.	6.25 - Dr Who.	10.15 - Journey Back.
6.30 - Happy Days.	6.50 - Top Sailing.	10.45 - Newsnight.
7.0 - Don't Just Sit	7.20 - Golden Soak.	11.30 - Cricket.
There.	8.10 - The British	12.5 - Close.
7.30 - Coronation Street.	Greats.	
8.0 - The Big Top	9.0 - News.	
Variety Show.	9.25 - The Good Old	
9.0 - Women of	Days.	
Courage.	10.15 - Bloomers.	
10.0 - News.	10.45 - Medical Express.	
10.30 - The Granada	11.15 - News Headlines.	
Band of the	11.17 - International	
Year 1980.	Athletics.	
11.30 - Late Call.	12.10 - Scottish News,	
11.35 - Enterprise.	Weather.	
12.5 - Close.	12.15 - Close.	

All heard and seen in Edinburgh 8/11-18/80.

As you can see, many European FM stations employ a "freeform" style and play a variety of music, rather than following a strict format of rock, country, jazz, etc. You've also probably noticed the lack of disco, country, gospel, soul, and Latin on many of these stations. Austria and France seemed to play mainly classical, rock, and jazz selections. In England and Scotland, 1950 rock was still played, with country music being popular also. Elvis Presley records are extremely popular in Great Britain, and at expensive prices. Records in Austria were selling between 160 shillings (\$12.80) and 180 shillings (\$14.40). I found everything to be at least double American prices.

I looked for antennas atop houses and buildings throughout my travels. All antennas were much smaller than we see here. Yet, they seemed to have the same number of elements. Not once did I see a tower with an antenna on it!

It was surprising to find so few FM stations in these large cities. I was expecting the FM band to be loaded with stations, but not so. I went into a Radio-TV store in Edinburgh and asked when the FM band was born in Europe. I was told 1950. The men I talked to were amazed that here in the US one could hear as many as three, four, or five stations on one frequency simply by rotating an antenna!

I enjoyed looking at FM tuners in these countries. Most are identical brands as we see selling here, but a few tuners did not go above 104 MHz. As yet, there are no FM stations in Europe above 102.1.

Television programs seem to be of a higher quality in Europe. One doesn't find a station overloaded with game shows, sobbing soaps, comedy programs, etc. Instead, there is much news and educational programming. Seem that competition and ratings are not stressed as strongly. Fewer stations in large cities no doubt account for this.

For DXing purposes, I bought an Imperial PR-202 AM-FM portable radio by Superscope. Cost was \$19.95. I am quite pleased with it, although I do get some cross modulation which is always uncalled for. During the summer, I was pulling in St. Louis stations at 310 miles with strong signals on this radio.

Now for the big question: If I suddenly moved to any one of these five cities, would I continue to DX the FM band? Doubtful, but I would try! Since there are fewer stations, no definite ID's or frequencies given, it would certainly be a challenge. The language problem would also make it difficult. DXing the AM band would actually be more enjoyable. Anyone have more to add to this? If so, please feel free to write.

NORTHERN FM-DX

Ralph Strobel, editor
2510 E. McGalliard Rd.
Muncie, Indiana 47303
(317) 288-5815
Deadline: the 10th

OCTOBER 1980

For FM DXers in Canada, the Northwest-Central states of WA OR ID MT WY ND SD NE MN IA MO and states east of the Mississippi River and north of the Mason-Dixon Line.

TEN YEARS OF FM DXING:

ANDY BOLIN HEARS OVER 2000 STATIONS!

Andy Bolin - 709 Lincoln Ave. - Charleston, IL 61920

So here it is 8/31/80. Ten years ago tonight radio station WQXR 97.7 Oxford, Ohio held a COLLECT CALL WEEKEND. On the other end of that phone was a guy you veterans will remember - Bill Bens. Bill turned me into something called an FM DXer. I haven't decided yet if I want to thank Bill, or pound him!

7/17 KILLER Es. From 0930 to 1300 Boston top of the band. @1010 WSDH w/mono "childrens program" 91.5 Sandwich MA (45). 1230 Tampa-WJIZ. 1248 "S WCTO" w/EZ 94.3 Smithtown NY (795). 1400 WKHC, WAMU, WJMD-Norfolk. @1419 WBCI "FM-96" w/S/R 96.5 Williamsburg VA (640); 1429 WIVA "94-S" w/E 94.1 Yorktown VA (655); 1431 WESR AM-FM ID w/S/upbeat MOR 103.3 Tasley VA (680); 1500 KRVS 88.1 from 88.3 Lafayette LA; 1530 KNUZ EZ 101.5 Tyler TX (640); 1606 KFMM S/P 107.9 from 99.3 Abilene TX; 1626 KKCC "Our second month of service to you," S/K 106.9 Clinton OK (655); 1628 KBIL S/R 92.9 San Angelo TX (895); 1633 KTCM "Q-100 All Star Radio" S/R 99.9 Clovis NM (910); 1717 "99" KSLS S/K 99.3 Liberal KS (685); 1721 KARB S 98.3 Price UT (1210); 1727 KFMG S/P 107.9 & "K-lite" KLT 88.3 S/G both new to the air & both Albuquerque NM (1070); 1807 "city" CITE S/French/upbeat MOR 107.3 Montreal PQ (840); 1814 CJAB S/French/upbeat MOR 96.7 Chicoutimi PQ (1060); 1815 CKO-FM1 S/English/upbeat MOR 106.9 Ottawa ON (750); 1830 CIGL S/EZ 97.1 Belleville ON (645); 1844 CIMF S/French 94.9 Ottawa ON; 1915 CHEZ S/P Rare IDer 106.1 Ottawa ON; 1850 CKAT S/K/Jingles 101.9 North Bay ON. Back from 1815 to 1920 most of Toronto was in at a close 520 miles. Later @2100 non-IDer "K-95" KIXV S/auto/R 95.3 Brady TX (860); 2111 KRUM S "super country" 103.1 Ballinger TX (855). TX fell to TV-6 @2140. 7/18 Es 0900 to 0938 KOME, KREX, KQIX, KCFR, KEPC, KILQ & KWDE all CO. 7/19 Tr w/WDSY 107.9 Pittsburgh PA all evening (430). 7/25 Tr @0000 w/WVC WV (430). Later @1600 to 2000 strong Au from mostly west- all noise. 2030 Tr w/WDSY & "the point" WFMT both Pittsburgh. @2145 Es touched from MA. 7/26 after 0000 Tr cont. from Pittsburgh and @0110 Tampa up on Es! Also in was WWL & WJIZ. @0125 WRYO w/S/ phone requests 98.5 Crystal River FL (805); Fade out @0147. Later 0845 to 1000 S. FL & Keys very strong MUF top. @1000 WRMF Titusville FL was heard on 97.9 and not 98.3. I assume that's off frequency & not a change; anyway, I don't count stuff off frequency. @1047 KHAAM TAM (1060) to 1102 fizzle. Later 1800 to 1836 El Paso to the top. @1829 "we're different" KENW S/EZ 89.5 Portales NM (925); 1839 "KEY" KKEE S 94.3 Alamogordo NM (1100); 1958 KUAT 90.5 Tucson AZ (1370); KAMA lasted to 2100. 7/29 Tr w/KQKQ after 0000 IA (420). 7/30 Tr @0000 KQKQ & KWIT. Later @1150 WQXQ S/R 88.5 Memphis; 1200 "3-103" WJHR 103.1 Jackson TN; Also @1200 WCHT TN c/semi WYAY. 7/31 Tr @1045 WVCP 88.3 mono/upbeat MOR Gallatin TN; 1107 WLIV mono/farm mx 95.9 Livingston TN. 1135 WJES mono/swap shop 104.9 Jamestown KY; 1200 WKRM S/G 102.3 Carthage TN. Later @2300 CJBC mono/French ID 99.3 London ON (435); 2329 WDEZ S/J 92.7 Flint MI. 8/1 Tr 0008 CBEE a/off 106.3 Sarnia ON. 8/2 Es 1650 to 1730 lots of MT. @1700 KQVY a strict non-IDer as "Y-95" & IDs only on the hour - S/auto/R 95.5 Butte MT (1310). 8/4 Tr WAIL, KQTR, KQRS, KTIS & KEET all MN. Later @1547 Es from KRAL CO. 8/6 Tr @100 WGVV S election returns 97.7 Sandusky MI (385). 8/10 Es 2000 WGBH MA. 8/17 Es KIDX @0120. Es on FM to stay 0139 to 0305 (1) from KIDX, KUFM, KYSS & KQVY; 0300 CKUA-FM3 & CKUA-FM2 both AT (1400). 8/23 Tr @2300 #1,999 was WJER S/G 103.7 Ladysmith WI (440). 8/24 Tr @0127 #2,000 was KRCH "K-102" S/auto/R 101.7 Rochester MN (390); 0400 10 watt 300 mile KBBG w/mono/soul 88.1 Waterloo IA. 8/26 Tr @206 WATZ S/nx 93.5 Alpena MI (445); Also in was WJER Buffalo NY (540) & CKGL ON (450). Later @1900 CBCL, CJBC both London ON; 2100 CHFI 98.1 Toronto (520); then it all fell apart.

2,000 & A SMILE, Andy Bolin

Saul Chernos - c/o P.O. Burnt River, ON Canada K0M-1C0
(summer address)

6/14 MS
0030 CKO-9 103.5 NS Halifax, "CKO" all news
6/14 tr
0100 WMUZ 103.5 MI Detroit
0200 WDFG 98.7 MI Detroit
0920 WCRF 103.3 OH Cleveland
1120 WRGO 97.1 OH Ashtabula
1135 WVIV 107.7 NY Wethersfield
1140 WWWW 106.7 MI Detroit, "W-4"
6/14 Es
1510 WDBO 92.3 FL Orlando, weak Es
6/15 Es
1730 KYND 92.5 TX Pasadena
6/15 tr
1830 CKAT 101.9 ON North Bay, ex-93.7
6/27 tr
2000 WYFM 102.9 PA Sharon-Youngstown OH
2023 WHNN 96.1 MI Bay City
2130 WQAL 104.1 OH Cleveland
6/28 tr
0000 WJST 104.5 OH Wooster
0030 WQXX 105.1 OH Salem
0130 WMMs 100.7 OH Cleveland
0130 WZPR 100.3 PA Meadville
0130 WNIC 100.3 MI Dearborn-Detroit
0200 WZZP 106.5 OH Cleveland
0230 WHBC 94.1 OH Canton
1915 CKO-1 106.9 ON Ottawa, "News-107" CKO
2005 CBOH 98.1 ON North Bay
6/28 MS
1758 CBBM 106.5 NS Middleton
6/29 tr
0332 WBOG 101.3 NY Rochester
1449 WKSX 99.5 OH Cleveland
7/2 tr
1900 WMC 104.3 MI Detroit
1920 WJW 97.1 MI Detroit
2317 WRIF 101.1 MI Detroit
7/3 tr
0003 WGCL 98.5 OH Cleveland
0025 WLYT 92.3 OH Cleveland Heights
0630 WLBS 102.7 MI Mt. Clemens
0930 WNCQ 97.5 NY Watertown
1038 WCLW 105.3 OH Mansfield
7/10 tr
1135 WKGW 104.3 NY Utica
1202 WRVO 89.9 NY Oswego
1228 WHCU 97.3 NY Ithaca
2200 WAER 88.3 NY Syracuse
7/11 tr
2253 WNCQ 101.3 OH Alliance
7/12 tr
1600 WBIV 107.7 NY Wethersfield
7/13 tr
1211 WGCL 98.5 OH Cleveland
1214 WMMs 100.7 OH Cleveland
1225 WBEA 107.3 OH Elyria
1230 WKSX 99.5 OH Cleveland
1250 WITL 100.7 MI Lansing
1437 WBBQ 98.7 NY Utica
1440 WHFM 98.9 NY Rochester, "FM-99"
1442 CFPL 98.3 ON Kingston
1447 CJBC 99.5 ON Kingston, (CJBC-18)
1630 MPXY 97.9 NY Rochester
7/14 tr
1210 CIEL 98.5 PQ Longueuil
1225 CKO-1 106.9 ON Ottawa, "News-107"

7/14 tr
1241 WHIV 95.1 NY Bristol Center
1300 WBYF 95.7 NY Olean
1515 CBO 103.3 ON Ottawa, "CBC-8"
1900 WVRG 104.1 MI Grand Rapids
7/16 tr
1100 WRRM 92.3 PA Warren
1200 WCHY 91.3 NY Syracuse
1203 WGMC 90.1 NY Greece
1220 WELV 103.7 NY Ithaca
1228 WSGO 105.5 NY Oswego
1255 CIMP 94.9 PQ Hull, FF
7/16 MS
1300 WPCB 94.9 GA Atlanta
7/16 Es (93.9 MUF)
2127 CROZ 93.9 NY St. Johns, "OZ"
2130 WBNM 90.3 NY Marytown
7/17 Es (107.9 MUF)
1230 WMEZ 94.1 FL Pensacola
1245 WCHY 94.1 GA Savannah
1248 WPCS 89.3 FL Pensacola
1250 WJCH 89.9 FL Jacksonville
1252 WLMY 92.3 AL Montgomery
1253 WQED 93.7 MS Biloxi
1254 WRNO 99.5 LA New Orleans
1457 WVEZ 97.1 LA New Orleans, "B-97"
1459 VALK 97.1 MS Meridian
1505 WSJC 107.5 MS Haggis
1510 KGAY 94.5 TX Gainesville
1512 KSMB 94.5 LA Lafayette
1513 WPAP 92.5 FL Panama City, "PAP"
1710 KLEJ 93.7 TX Austin
1730 KESZ 93.9 TX Ft. Worth
1800 KJAK 92.7 TX Slaton
1809 KAPM 92.5 TX Dallas
1818 KNOK 107.5 TX Ft. Worth
1820 KVIL 103.7 TX Dallas
1828 KNUZ 98.7 TX Dallas "K-News"
1834 KNGC 102.9 TX Dallas
1840 KMEZ 100.3 TX Dallas
1845 KSNY 92.5 MO Joplin
1854 KTTS 94.7 MO Springfield
1937 KPTH 107.9 AR Jonesboro
1940 KRAV 96.5 OK Tulsa
1945 KCKN 94.1 KS Kansas City
1950 KOFN 104.1 OK Oklahoma City
1955 KLUP 97.9 OK Poteau
2004 KATP 100.5 OK Oklahoma City, "Cat"
2005 KLUH 99.9 TX Wichita Falls
2008 KTCB 99.9 AR Ft. Smith
2010 KROZ 102.9 AR Harrison, "Z-103"
2012 KTFX 103.3 OK Tulsa
2015 KKAJ 95.7 OK Ardmore
2020 KINB 107.3 OK Poteau
2025 KNOD 97.5 OK Tulsa
2030 KHEH 99.5 OK Henryetta
2037 KTEW 93.9 OK Ada
2039 KLTE 101.9 OK Oklahoma City
2055 KWEN 95.5 OK Tulsa, "Queen"
2130 KEEC 94.7 OK Oklahoma City
2133 KKNQ 92.5 OK Oklahoma City
2157 KAEZ 107.7 OK Oklahoma City
2159 KBFL 90.3 MO Buffalo
2200 KLUH 88.9 MO Jefferson City
2229 KNQE 92.1 MO Butler
2233 KCBW 92.1 MO Sedalia
2300 KOSU 91.7 OK Stillwater

7/17 Es
2300 KCSC 90.1 OK Edmond
2301 KWSE 89.5 OK Tulsa
7/19 tr
1202 WCHF 96.5 NY Rochester
1233 CFNO 95.9 ON Ottawa
7/20 tr
0317 WJHL 98.9 MI Petoskey, "JHL"
0345 WNCQ 101.3 OH Alliance
0400 WAEZ 97.5 OH Akron
7/22 tr
1010 WRLK 106.9 NY Auburn
7/23 tr
1800 WSNM 92.1 NY Baldwinsville
1823 WYFM 102.9 PA Sharon, "Y-103"
A very poor season for Es. One really nice opening 7/17 to OK-TX-FL produced 51 FM's (50 new). In addition, I checked only one "top of hour" on TV and made 3 (all new) ID's. The day before this I had E's on TV & FM to the east, fairly rare here. Then on 8/2 I heard a WML ID and a short (1/2 minute) bit of programing before CBL & WBLK took over. Not a typical MS but not E's, as not a trace on TV, just nice tropes up north. In addition, not another trace of E's on FM. Other ES not bad and only one decent FM tropes opening (6/28). I've found a 300 ft. "lump" hill in a field near here (including a tower), and caught WYFM in PA (one of the better stations I've had on tropes, this summer), in well, despite horrible conditions down below. Bob Seybold could have competition here, although I bet he doesn't have to face swamp/mosquitoes and porcupines that refuse to let you pass on a narrow bridge over the mosquito infested swamp, days after the resources ministry failed to catch a huge bear they saw there! Am puzzled over 94.3 in Belleville (8/2). Heard ... "It's 7 degrees in Belleville. No calls in FM ATLAS, just a power of 50,000 watts. I guess their CP has been granted! 73's, Saul

7/23 tr
1830 CBOF 102.5 ON Ottawa
1840 WDKX 103.9 NY Rochester
7/24 tr
0545 WNTQ 93.1 NY Syracuse
0800 WWSR 93.3 NY Jamestown, "SE-93"
1005 CINF 94.9 PQ Hull
1014 CFMK 96.3 ON Kingston
7/25 tr
0739 CKBY 105.3 ON Ottawa
8/2 tr
0855 7777 94.3 ON Belleville
8/2 MS
0904 WML 93.9 FL Miami Beach
(New underlined)

Frank Wheeler - 6589 Wattaburg Road - Erie, PA 16509

7/2 tr 0959 WOSE 94.5 OH Port Clinton
1030 WJR 96.3 MI Detroit, 154 miles
7/13 tr 71 WDBN 94.9 OH Medina, (new)
72 WJMC 94.7 MI Birmingham, 195 miles
7/17 Es 2030 WAAG 94.9 IL Galesburg, (1st skip & new state), 533 miles.
2032 ?? 93.7 or 94.7 unid 2 KS stations, one w/KS baseball.
7/24 tr 0630 WEMU 88.1 MI Ypsilanti, 174 miles. (new)
0634 CJOH 88.7 ON Windsor, 154 miles.
0728 CKLW 93.9 ON Windsor, 154 miles.

Not much of a report, but I received my first skip WAAG and other KS stations unid. 73s, Frank

Neil Kazarens - 30 King Philip Rd. - Pawtucket, RI 02861

6/18 Es
1437 WTSB 90.1 AL Troy
1910 KJSH 91.1 MN St. Paul
6/18 Es
1911 KAXP 91.7 MN Grand Rapids
1941 KBJR 90.1 MN Collegeville
First FM Es ever - Rx is Sony portable. 73 & good DX, Neil

Robert S. Ross - VE3JFC - Box 4373, Stn. C - London, ON Canada N5W5J2
Equipment: Marantz 2226 & dipole, Panasonic RF 1115 & whip.
Antennas on 9th floor apartment.

4/1 tr WRSB 107.7 MI Alpena
WCMU 89.5 MI Mt. Pleasant
WJMC 94.7 MI Birmingham
CEET 98.1 ON Toronto
5/13 tr WENE 107.9 MI Point
5/20 tr WCMU 89.5 MI Mt. Pleasant
5/26 tr WBCL 90.3 IL Ft. Wayne
7/13 tr WJOK 105.1 MI Jackson
7/14 tr WJOK 91.9 IL Springfield
WJOK 89.1 MI Ypsilanti

7/15 tr WSWT 106.9 IL Peoria
WAUR 107.9 IL Aurora
WMBI 90.1 IL Chicago
7/20 tr WBNQ 100.5 OH Findlay
7/7 tr WOSD 106.9 ON Canton, ex-WHLQ
8/19 tr WFLB 107.3 MI Greenville
WHSB 107.7 MI Alpena
7/25 tr WJRW 104.3 MI Wisconsin Rapids
WJHL 96.9 MI Petoskey
WJOK 104.5 MI Marshfield

WJOK after Ray 1

Harry J. Hayes - 9 Henry St. - Wilkes-Barre, PA 18702

Equipment: Wilkes-Barre - Zenith Trans Oceanic w/whip
Gouldsboro - GE Superadio, CM Amp., Finco FM-4G at 25 ft.

7/6 Es
1345 KWR 93.7 SD Winner, r, very strong
1401 KRSW 91.7 MN Worthington, ID
7/17 Es
1852 KNEH 94.7 NE Norfolk, ID
1900 KWOA 95.1 MN Worthington
1903 KGBI 100.7 NE Omaha, religion
1912 KYSM 103.5 MN Mankato
1916 KEXL 106.7 NE Norfolk
1920 KICD 107.7 IA Spencer, extensive news
1932 KLFM 104.1 IA Ames, ID
1947 KGOR 99.9 NE Omaha, ID
1953 KFRX 102.7 NE Lincoln, r, "K-103"
1958 KTWV 107.9 MN Anoka, "K-Twin"
2005 KDLO 96.9 SD Garden City, k
2020 KCHS 102.3 IA Cherokee, town mention
2021 KFMQ 101.9 NE Lincoln, Acknowledging
call from Friendship, NY
2048 KJLS 103.3 KS Hays, Temp. at 103°
2100 KDMT 97.3 IA Des Moines, no ID
2100 WTBW 97.3 KS Topeka, mixed w/KDMT tent.
2114 KSRD 96.9 NE Seward, "Your Soft Rock"

This season had really only three good days so far: the 6/18 and 7/17 Es and the 6/27 tropo. The meteors of 8/12 were a disappointment this year. Tropo were far and few between as my number of DX loggings for August shows. The WX this summer has been hot and windy with most days having thunderstorms and indeed many severe ones, one of which cost me \$80 in roof repairs and no antenna losses since I have no outside antenna on that house, hi. I picked up the GE Superadio for \$70 at a local downtown department store so I would have another AM RX, but the radio has shown its superiority over my Zenith for sensitivity and selectivity on FM, so now I am keeping the GE in Gouldsboro connected to my Finco. The Zenith will serve in Wilkes-Barre as an AM RX and for E Skip on FM with its whip. The 7/17 Es opening was done on the Zenith with the whip from Wilkes-Barre. Oddly enough, my Zenith is a much better performer on its built in whip than the GE is on its. Thus, for people thinking of getting a Superadio for FM do intend to connect it to an outdoor antenna because its built in FM whip is just not all that sensitive. I haven't tried it, but possibly rabbit ears will improve performance also.

73s, Harry

+ + + + +

Bob Zent - 1835 Fruit St. - Huntington, IN 46750

7/29 tr
0600 WUTC 88.1 TN Chattanooga 415
0600 WMBW 88.9 TN Chattanooga 415
7/30 tr
0630 WCLL 88.7 OH Kettering, g, 10w 105
0630 WQRP 88.1 OH W. Carrollton, g, 10w 125
2300 WHPK 88.3 IL Chicago, r, 10w 135
2320 WUTC 88.1 IL Chicago, p, 10w 135
7/31 tr
2209 KFL 103.3 IA Pella, baseball 400
2220 KMGK 93.3 IA Des Moines, r 430
2222 KMGK 98.7 IA Centerville, g 395
2228 KAOL 101.1 MO Carrollton 440
2231 KLYF 100.3 IA Des Moines, m 430
2252 KYNN 94.1 NE Omaha, k 555
(positive ID at 2300)
2322 KGGG 94.9 IA Des Moines, r 430
2331 KRRQ 102.5 IA Des Moines, r, "Q-102" 430
2340 MOI 90.1 IA Ames, j 435
8/1 tr
2214 WOKZ 100.3 IL Alton, r, "Z-100" 295
2218 WKDQ 99.5 KY Henderson, r 245
8/6 tr
0622 WFAZ 92.9 NY Buffalo, r 370
0627 WGRQ 96.9 NY Buffalo, p 370
0647 WDCX 99.5 NY Buffalo, prog. guide 370
0652 WBSN 102.5 NY Buffalo, "Rock-102" 370

August has been a fantastic month for tropo. New loggings to 400-500 miles plus, and very good signal strengths. Hopefully, this will continue into the fall. 73s, Bob

7/17 Es
2118 KZBT 93.5 NE Hastings, EL
2125 KMGK 93.3 IA Des Moines, ID
2142 KEEY 102.1 MN St. Paul-Minn., ID
2148 KQRY 105.9 NE Kearney, ID, "KQ-106"
2152 KELN 97.1 NE North Platte, SIDs
2210 KMGK 93.3 IA Des Moines
2220 KWR 93.7 SD Winner
2220 KKRL 93.7 IA Carroll, town mention
2230 Skip gone
7/25 Au
1900 WMPR 88.1 SC Sumter, Ending All
Things Considered, SC net. ID

8/9 tr
0330 WZIR 98.5 NY Niagara Falls, WBRE off
0445 CKQT 94.9 ON Oshawa, "Motor City"
ments. "CKAR-1350 and CKQT FM-94" IDs
8/9 GW
1525 WDSB 100.1 NY Woodstock, r,
typical small town

8/24 tr
0900 WCFX 92.1 PA Palmyra, ID, WMMJ null
0445 CKQT 94.9 ON Oshawa, "Motor City"
ments. "CKAR-1350 and CKQT FM-94" IDs
8/9 GW
1525 WDSB 100.1 NY Woodstock, r,
typical small town

Roger Winsor - P.O. Box 536 - Portage, IN 46368

Hello. A good duct into So. MN this am brought in five new stations. They were:

8/24 tr 0110 WLOL 99.5 MN Minneapolis, almost perfect rock radio, WEFM nulls
0120 KDWB 101.3 MN Richfield, Zerver jewelry ad, "S-101," r
0130 KEEZ 99.1 MN Mankato, thru WNUW, "from KEEZ-FM"
0145 KAUS 99.9 MN Austin, "FM-100 Country," Austin airport wx
0215 WRLO 105.3 WI Antigo, "FM-105," r, asking for local nx
reporter in Tomahawk/Rhineland area

Also heard: Eau Claire strong on 104.5; all Madison, WI and Waterloo, IA also.
WEHB 89.9 Grand Rapids, w/jazz talking about moving and needing money. A few
days ago Detroit and South Ontario in, but no new stations heard. Dial is get-
ting very crowded with 100kw stations.

+ + + + +

Fred Nordquist - 7945 Boxford Rd. - Clay, NY 13041

Equipment: Receiver: Heathkit AJ-15; Antenna: JFD LPL IUA at 45 feet. All DX recorded
on Roberts 770X reel to reel tape recorder. Antenna after 8/16: Stereo Probe 9 at
45 feet. New loggings underlined solid. New prop. mode underlined broken.

6/30 Es (spotty to south)
2138 WJAD 97.3 GA Bainbridge, ID, "97-Rock" 970
7/1-7/13 - Vacation to OK/KY - Hope no DX was around.
7/16 Es Localized to MF 1916-2145 (New Prov. #5) Strong signals
1916 CBOX 93.9 NF St. Johns, "OX FM," uses CBOX calls, r, ad 1140
1925 CBNM 90.3 NF Marytown, CBC Radio, mono, variety 1040
1934 CIOZ 96.3 NF Marytown, "OX FM," wx, ads 1040
1938 CPOZ 100.3 NF Argonia, "OX FM," ad 1100
2035 CPOZ 98.5 NF Stephenville, "OX FM," r, 920
2038 CKOZ 92.3 NF Corner Brook, "OX FM," r, low modulation 930
2108 CBYP 89.5 NF Portland Creek, CBC nx, // 90.3 NF wx 1000
2128 CBFB 97.1 NF Baie Verte, CBC Radio, // CBYP & CBNT 1010
7/17 Es to west 1817-2320, MUF 108 + MHz (very intense)
1917 KTPK 106.9 KS Topeka, "Country-107," ads, o/WRLX! 1045
1922 KSAS 106.5 MO Liberty, wx, ID 980
1924 WNCV 105.7 IL Peoria, local ads, r, 710
1928 KIL 105.5 IA Mt. Pleasant, ad, ID 800
1936 KLFM 104.1 IA Ames, SID, ads 885
1945 KVG 104.3 KS Great Bend, ID, Beautiful nx, o/WKOW! 1220
1952 WQCY 99.5 IL Quincy, "FM-99.5," ad, TC 815
2011 KVKI 93.3 MO Kansas City, "Sonlife-93" 1000
2115 KSRD 96.9 NE Seward, ID, "S-97," r, o/WOR! 1080
2133 KERV 103.7 KS Wichita, temp, ads 1165
2135 KICF 95.1 KS Wichita, local ads 1165
2153 KINT 91.9 KS Dodge City, ID, r, wx 1295
7/19 GW 1000 WACJ 104.1 NY Buffalo, ex-WWOR, "FM-104," oldie rock
7/22 Es 2250 UNID 98.5 local PSA - S.E. Denver - probable KYGO
7/22 GW 2300 WZIR 98.5 NY Niagara Falls, r, ex-WELD
7/25 Au 1730 No IDs
7/25 Es 2313-0050 7/26 to South
0050 WGGC 90.7 FL Panama City, ID 1040
7/26 tr 0108 WVIC 89.1 IL Mt. Carmel, SID, r, steady signal after
Es to south faded out. 690
7/26 Es 0944 KWJS 94.9 TX Arlington, ID
0952 KETR 88.9 TX Commerce, ID, wx
8/9 MS 0200 KROA 95.7 NE Grand Island, ID, (perseid MS), prev. Es 1140
8/11 MS 0503 WZZR 95.7 MI Grand Rapids, ID 475
8/16 Installed new antenna - CM Stereo Probe 9 - much improved directivity.
8/17 tr 0006 WJPM 93.7 MI Grand Rapids, nx, wx, thru WBLK 475
0029 WLVU 99.9 PA Erie, m, wx, ID, (WNOZ off) 215
2140 WVP 89.5 VT Windsor, drama, NPR, (all weak tr on 8/17) 190
8/18 tr 2040 WNEE 97.3 IN Ft. Wayne, r, o/WRCU 485
2200 WAUS 90.7 MI Berrien Springs, ID, nx 540
8/19 Es briefly at 2355. No ID's, MUF 90.3
8/25 tr Super tropo to West (820 miles out).
1759 WRAD 90.7 WI Delafield, NPR, ID 615
1801 WZZR 95.7 MI Grand Rapids, r, prev. MS 585
1802 WGLB 100.1 WI Port Washington, k, nx, ID 595
1832 WDLH 89.3 IL East Moline, g, Moody Bible ad 730

+ Continued +

NORTHERN FM DX

Fred Nordquist cont'd:

OCTOBER 1980

8/25 tr	1957 WQON	100.1	MI Grayling, ID, r, "100-FM"	445
	2053 CKHE	101.9	ON North Bay, "Country-101"	280
	2300 CKNX	101.7	ON Wingham, r, "FM-102," o/WECQ	270
	2314 KUMI	90.9	IA Cedar Falls, in solid, (No hum - I've relogged this one three times, hi).	820
8/26 tr	2319 WBSU	88.9	NY Brockport, Eting to West (out to 650 miles)	90
	1816 WLKI	100.1	IN Angola, r, ID, TC, nx	460
	1849 WILL	90.9	IL Urbana, c, ID	650
	1858 WEMU	89.1	MI Ypsilanti, ID, j	385
	2153 WVEP	88.1	IN Elkhart, "Rock-88" & "FM-88"	505
8/31-9/1	- WSEN	92.1	noted off air - back on 9/1 pm	
9/1 AF	(Airplane Flutter)			
	1050 WLPL	92.3	MD Baltimore, ID, wx, r	280
	1703 WGSB	91.9	ND Tacoma Park, c	295

Total logged now at 1116 - discounting the KAZI - 88.7 Austin, TX claimed to be heard on 5/30/80 at 2019 - more likely I heard the ID of KTCU, but I'll never know since I didn't have my recorder on at that time. We had a great time at the WTFDA Convention in Dunkirk, despite the stormy wx. Bob Seybold provided non-stop DX, food & drink. 73.

Paul Mount - 471 Emerson Ave. - Teaneck, NJ 07666
Sanyo M-9980 & cassette w/whip

7/16 Es	1840 CJOZ	92.1	NF Argentina, rpt	7/17 Es	1934 KCMB	105.7	IA Des Moines
7/16 tr	1930 WFSI	107.9	ND Annapolis, g	1938 KIOV	104.7	SD Sioux Falls, k	
1930 WSNJ	107.7	NJ Bridgeton, M nx	1959 KGOR	99.9	NE Omaha, r		
2001 WKQV	92.1	NJ Vineland, r, (new calls)	2002 KHAkt	98.1	IA Cedar Rapids, ABC/E nx		
7/17 Es	(All New)		2023 KSRD	96.9	NE Seward, r		
1844 KQDE?	92.1	MN Mankato, local spot	2037 KOWt	94.1	NE Omaha, k, local spot		
1853 KSMX	92.1	IA Fort Dodge, r	2039 KGIN	96.5	NE Grand Island, Royals bb		
1913 KRSWt	91.7	MN Worthington, wx for SW MN	2041 KWOA	95.1	MN Worthington		
1916 KICD	107.7	IA Spencer, nx	2051 KULLt	94.5	KS Scott City, SC bb		
	(to column on right)		2109 KMAZ	92.9	NE Beatrice, k		
			2140 KSTP	94.5	MN St. Paul, r, "KS-95"		

As usual, thanx to Joe Fela for tips. This was the best opening I ever experienced. Two states, SD & KS, are still needed on AM from here. Called Steve McIntire & Neil Zank to see if they were hearing anything. Steve said TV was good; Neil had things since 1345 that afternoon! Called KSRD - Tom Smith said he'd been hearing the east coast all day and also got a call from Williamsport, PA. Around 2010 all disappeared.

8/2	tr	9/4	tr
2000	Phil & Hartford strong, some \$	2100	WOLC 102.5 MD Princess Anne, g
8/30	tr	2112	WGRF 99.3 NJ Pleasantville, r
2059	WTEV 88.75 RI Providence-MA New Bedford, (ch. 6), no audio calls given	2135	WESR 103.3 VA Tasley, Al Birt wx
		2200	WJRE 100.1 NJ <u>Manahawkin</u>

Note new city of license for WJRE. Manahawkin is the nearest city on the mainland to Ship Bottom. Guess where I found out about this opening? WESR was my first VA to hear call letters on. Never can hear that 100.5 that blasts into S. Plainfield. Missed W but had a good time at IRCA in Louisville.

73-PMW

Note new city of license for WJRE. Manahawkin is the nearest city on the mainland to Ship Bottom. Guess where I found out about this opening? WESR was my first VA to hear call letters on. Never can hear that 100.5 that blasts into S. Plainfield. Missed WTFDA but had a good time at IRCA in Louisville.

73-PM

Dave Brunfield - 1505 Kimberly Lane - Muncie, IN 47304
Equipment: 2270 Marantz receiver w/Winegard antenna and rotor at 40 feet.

8/13	tr			8/24	tr				
0139	WKMS	91.3	KY Murray	310	0255	KKEY	102.1	MN St. Paul-Minneapolis	520
8/13	MS				0257	KDWB	101.3	MN Richfield	505
0200	KEYS	88.5	ND Balcourt (new state)	950	0258	WISM	98.1	WI Madison	280
8/15	Au				0300	WIBA	101.5	WI Madison	280
2310	WRRS	90.7	FL Boynton Beach	1000	0302	KQRS	92.5	MN Golden Valley	525
8/24	tr				0303	WIFC	95.5	WI Wausau	390
0000	WHWC	88.3	WI Menomonie	480	0305	KEEZ	99.1	MN Mankato-Blue Earth	520
0109	KAUS	99.9	MN Austin-Albert Lea	460	0423	WZUU	95.7	WI Milwaukee	230
0146	WSPU	90.5	WI Platteville	325	0458	WIXI	101.1	WI Green Bay	325
0157	KTCR	97.1	MN Minneapolis	510	0501	KLSE	91.7	MN Rushford	425
0203	KLSS	106.1	IA Mason City	450	0509	WDLB	106.5	WI Marshfield	400
0227	KSTP	94.5	MN St. Paul	520	8/26	tr			
0233	WATL	93.7	MN Minneapolis	510	0105	WJLY	98.3	WI Menomonie Falls	260

+ Continued +

NORTHERN FM DX

More From Dave Brunfield

OCTOBER 1980

8/26 tr	0145 WJML	98.9	MI Petoskey	8/26 tr	0500 WCSR	92.1	MI Hillsdale	120
0200 WWRM	106.7	MI Gaylord	310 9/3 GW					
0300 WUGN	99.7	MI Midland	240 0800 WAXT	96.7	IN Alexandria			11
0344 WZEE	104.1	WI Madison	280 9/7 tr					
0359 WVCY	107.7	WI Milwaukee	230 1959 WKZN	96.9	IL Zion-Kenosha WI			200
0442 WKJF	92.9	MI Cadillac	275 9/9 tr					
0452 WHSB	107.7	MI Alpena	340 2100 KCMW	90.9	MO Warrensburg			490

All new. Totals: 613 with 132 Ed. band, including 19 10 watters.

Ralph Strobel - 2510 E. McGalliard Rd. - Muncie, IN 47303
Equipment: Heath AJ-1510, Winegard antenna w/rotor at 60 ft.

8/23 tr	2350 WSRX	88.5	MI Allendale, rj, 10w	8/26 tr	0158 WITW	96.7	MI Cadillac	275
	(My 35th 10 watt heard o/WNUB & KUMR)			0200 WATZ	93.5	MI Alpena		340
8/24 tr	0109 KAUS	99.9	MN Austin-Albert Lea	9/3 GW				
0147 WSPU	90.5	WI Platteville, s/off	460 0535 WAXT	96.7	IN Alexandria, k			11
0205 KLSS	106.1	IA Mason City, s/off	325 1st day on air taped. "IN Country-97"					
0208 KSTP	94.5	MN St. Paul	450 9/5 tr					
0212 KKEY	102.1	MN St. Paul-Minneapolis	920 1945 WTHH	88.5	IL Park Ridge, 10w			175
0230 WATL	93.7	MI Minneapolis-St. Paul	520 2358 WCBN	88.3	MI Ann Arbor, 10w			150
0300 WIBA	101.5	WI Madison, o/WJLY	510 9/6 tr					
8/25 tr	1930 KSAY	96.1	IA Clinton, o/WQLK	0201 WXXI	91.5	NY Rochester		440
1934 KLYP	100.3	IA Des Moines	0221 WGRG	96.9	NY Buffalo			380
2000 KDMY	97.3	IA Des Moines	450 0358 WBLK	93.7	NY DePew-Buffalo			385
2017 KFJB	102.1	IA Marshalltown	450 0400 WFXZ	92.9	NY Buffalo, ex-WBUF			380
2102 WKZY	97.1	MI Escanaba	450 9/9 tr					
2200 WWRM	106.7	MI Gaylord	420 2030 KCMW	90.9	MO Warrensburg,			490
2300 WKHQ	105.9	MI Charlevoix	400 o/WBDG	Indy & WILL Urbana				
8/26 tr	0100 WJVL	99.9	WI Janesville, s/off	310 2100 WTBW	97.3	KS Topeka, o/WNEE		530
				330 2130 WPRC	100.1	IL Lincoln		225
				2155 KANU	91.5	KS Lawrence		540
				250 2200 KBIA	91.3	MO Columbia		400

Once again, luck was with me and I heard and taped my 35th 10 watt station. WSRX in Allendale, MI has to be one of the craziest stations I've ever heard! The DJ must have been either stoned or drunk! (perhaps both?) Here is what I taped: "Disco! Put some disco on. Oh great, I'll do that, in a certain special...burrrp!...way. I'm going to play some Beatles here...burrrppp!!...Come Together." Some music began and the DJ says, "Upps, that's not them." Then he played something else which still was not the Beatles. All summer long I've tried to take Jim Alexander's good advice and find an antenna man to horizontally stack two Winegard FM antennas for me. I called every antenna service in town. Most antenna men here had never even heard of such a thing! Can you believe this? Some stores wouldn't even return my phone calls after I told them what I wanted. I finally found one man who was interested, but had never done this type of work. He said he would let me know soon. I even had him read the article in a previous VUD regarding antenna stacking. One month passed with no response, so I finally stopped at the store where he works. He told me that they really weren't equipped to do that type of work and it probably wouldn't help reception anyway! I still can't believe what morons and idiots these so called antenna men have proven to be. What am I supposed to do, fly an expert in from the Winegard factory? Any of you DXers have any suggestions? If so, let me hear from you before the snow starts to fly this winter.

I can't understand why Central Indiana needs another hillbilly station over in Alexandria! Just another one of those worthless auto garbage stations to put up with. This station is on 24 hours every day, seven days a week. My best frequency of 92.1 with 26 stations heard, is now ruined. WBSB had to go on 24 hours seven days a week. When I began DXing in 1972, I didn't tape anything. What a fool I was! When I told some friends here I had heard TX and FL on FM, I was accused of being a liar. So, in late May of 1977, the tape decks began recording everything. After three months of recording and saving ID's, I played the tape back and counted the number of stations I had recorded. Believe it or not, but I had exactly 300 ID's taped with 103 of them being from the Ed. band. If anyone can top this, more power to you. The previous record was 103 Ed. band stations in one year's time. 1977 was a good summer, but certainly not as good as 1980. Some stations I heard in the early 70's have never been heard again to get on tape, especially some heard by Es.

Total now: 944, with 237 Ed. band.

(continued on page 27)

SOUTHERN FM DX

Danny Buntin, editor
1312 N. Skyline
Stillwater, OK 74074

DEADLINE: the 10th

AUGUST DX TAKES A WORSE THAN USUAL SHAMP

Pat Dyer, 5315 Silvertip Dr., San Antonio, TX 7828 - June 2-15 w/prior addenda

Equipt: Realistic TM-1001 into an Allied 426; 6-el. Archer antenna at 20 ft. with rotator
Central Standard Time used, new underlined, t-tentative

5/23 Es
2109 WRCK 94.7 IL Chicago, ID, r 1045

5/29 Es
2032 KJMC 93.7 UT Richfield, ID, r 995

6/2 Es
1110-1115 WSCI 89.3 SC Charleston, c
1210-1215 unIDs 88.1, 88.5, 89.7

1305 WKNC 88.1 NC Raleigh, r 1230
1317 WQDR 94.7 NC Raleigh, r

WSHA 88.9 NC Raleigh
WDAV 89.9 NC Davidson, c 1110

1324 WFDD 88.5 NC Winston-Salem, c
1336 WQDR 96.9 NC Goldsboro, "Q-96" 1260

1338 WLAP 94.5 KY Lexington, KY nx 995
1342 WKBT 95.7 VA Norfolk, "Tidewater"

1347 WIAN 90.1 IN Indianapolis, ID 995
1349 WFBQ 94.7 IN Indianapolis, wx

1358 WFLA 89.3 KY Louisville, ID 945
1401 WKQQ 98.1 KY Lexington, r, "Double-I"

1410 WFBT 105.9 OH Middletown, Reds promo
1420 WZZQ 95.1 IL Decatur, area ad 985

1421 KSLQ 98.1 MO St. Louis, ID 790
1423 KSHS 94.7 MO Crestwood, r, ads 780

1425 WFTT 98.7 IL Chicago, ID 1045
1426 WRCK 94.7 IL Chicago, "V-Rock"

1429 WPIX 94.1 IL Mt. Vernon, ID 820
1431 WYCA 92.3 IN Hammond, ID 1040

1457 WKZN 96.9 IL Zion, area ads 1080
1513 KESD 88.3 SD Brookings, rj 1020

KFJM 89.3 ND Grand Forks 1240
KEYAT 88.5 ND Balcourt, k 1335

soon f/outa
6/3 Es
1046 KBYU 88.9 UT Provo 1045

1105 KUER 90.1 UT Salt Lake City 1080
lull to

1132 KSUS 92.5 UT Cedar City, k, ID 1005
1x

KBAT 93.3 TX Midland, ads 275
Es

1150 KRBE 94.9 UT Cedar City, area psa
(weird as very little on Ch 2, 3)

(92.5 & 94.9 loud with little fading, no
trace of 93.5 in St. George though)

1200 apr f/outa
6/4 Es

1410-1430 unIDs to 90.9
1415 KUN 90.9 IA Cedar Falls 960

nx IA nx
1428 KESD 88.3 SD Brookings, j 1020

6/5 tr
0059 KENW 89.5 NM Portales, ID 430

1135 KKKK 99.1 TX Odessa, g 280

6/6 tr
0059 KENW 89.5 NM Portales, ID, s/off 430

0601 KQIP 96.9 TX Odessa, area ads 280
KKQQ 99.1 NM Clovis, ID, nx 435

0605 KBUY 94.1 TX Amarillo, ID, k 440
0606 KQMG 97.9 TX Amarillo, local nx

0610 KVLV 91.3 TX Beaumont, ID 275
(off back of antenna)

0614 KQMG 99.9 NM Clovis, ID 435
0623 KYTX 98.7 TX Amarillo, ads, "KY 99 FM"

0635 KLBK 94.5 TX Lubbock, town ID 340
0647 KVMJ 103.3 TX Midland, local ads 275

0652 KQJZ 105.9 OK Hobart, area ads, 385
"KQ-106"

0657 KHOC 105.5 TX Levelland, ads, ID 360
0700 KAGC 89.9 TX Amarillo, ID, "FM-90" 440

KQSU
91.7 fm

6/7 Es
2100 KCSW 88.5 CA Northridge 1210

2105 KPST 89.3 CA Pasadena 1185

6/8 Es
2035 KCSW 88.5 CA Northridge, k 1210

KPCST 89.3 CA Pasadena, c 1185
KCRW 89.9 CA Santa Monica, discus. 1200

KXLU 88.9 CA Los Angeles, c 1190
2040 KLCN 88.1 CA Long Beach, k 1130

2045 f/outa
6/9 Es

0932 unID 89.5 lull then
0945 WFTT 89.5 FL Melbourne, r 1090

0955 WUSF 89.7 FL Tampa, c 985
WYFM 94.1 FL Lakeland, ad 1010

WYNN 94.9 FL Tampa, r 985
WMTT 93.9 CA Moultrie, k 885

0956 WAIY 96.9 FL Jacksonville, r 1015
0959 WNNF 88.5 FL Tampa, ID 985

1000 WXL 94.3 AL Abbeville, ID 805
1002 WPCS 89.3 FL Pensacola, AFM nx, ID 685

1008 WFOY 97.7 FL St. Augustine, area nx 1035
WQHL 98.1 FL Live Oak, k 930

1010 WCN 98.5 FL Panama City, m 780
1011 WLW 94.9 FL Tallahassee, ID 855

1012 WBSU 96.7 SC Beaufort, ID 1075
tr

1014 KQKY 94.1 TX Beaumont, ID 275
cont.

SOUTHERN FM DX

Dyer, cont.

OCTOBER, 1980

6/9 Es
1021 WJCT 89.9 FL Jacksonville, c 1015

1026 WBCM 98.9 FL Tallahassee, psa 855
WYDT 99.9 FL Palatka, k 1015

WJKT 95.1 FL Jacksonville, r 1015
1030 WMEZ 94.1 FL Pensacola, ID 685

1032 WTKX 101.5 FL Pensacola, r
1100 f/outa

1140-1215 unIDs to 99.1 (1140-1205, lull)
1215 WACF 98.5 IL Paris, wx, ID 930

WLPW 94.5 IL Champaign 935
1217 WIAI 99.1 IL Danville, k 960

1220 WIL 92.3 MO St. Louis, ads, wx 790
1221 KCLC 89.1 MO St. Charles, r 790

1224 KSLQ 98.1 MO St. Louis, r 790
1225 KSHS 94.7 MO Crestwood, r 890

1226 WCRG 95.7 IL Effingham, ad 870
1227 WIBT 91.1 IL Carlinville, g 835

WBEZ 91.5 IL Chicago, drama reading
1227 WYCA 92.3 IN Hammond, g, ads 1040

1243 WHPF 98.9 IL Rock Island, "FM 98.9"
1245 WLVE 94.9 WI Baraboo, ID, m 1085

1248 KHAKT 98.1 IA Cedar Rapids, k 945
1251 KOEL 92.3 IA Oelwein 985

soon f/outa
6/12 Es

0815-0845 unIDs to 97's (much GCI from in
state trop)

0849 WXY 93.5 SC Columbia, ID 1075
0853 WYMX 105.7 GA Augusta, local ad, r

0856 WBBQ 104.3 GA Augusta 1010
0900 WRAS 88.5 GA Atlanta, ID 880

0903 WSBT 98.5 GA Atlanta, m 880
0905 WQXI 94.1 GA Smyrna, ads, "94-4" 875

WHPG 89.3 GA Atlanta 880
0909 WZZM 103.1 GA Augusta, "Z-103" 1010

0913 WBCY 107.9 NC Charlotte, r 1105
(VOR's in)

0919 WVID 106.7 GA Gainesville, "Wide-107"
0924 WQSB 105.1 AL Albertville, wx, ID

0925 WTRQ 104.1 NC Winston-Salem, ID 1150
0929 WRQK 98.7 NC Greensboro, ID 1175

0930 WSPA 98.9 SC Spartanburg, ad 1035
0931 WQUT 101.5 TN Johnson City, ads 1050

0934 WTVK 107.7 TN Knoxville, wx, ID 990
0944 WKPT 96.5 TN Kingsport, town ID 1045

1000 WYCE 88.3 TN Galatin, wx, ID 850
1001 WFSN 88.1 TN Nashville, s/on 820

1006 WEXU 88.9 KY Richmond, KY nx 995

Randall B. Clark, Rt. 9, Box 231 (Dutch Ridge), Parkersburg, WV 26101 - Aug. 6 to Sept. 4

Equipt: Realistic STA-42 with a 3 ft. long twin lead up at 45 ft. AGL, 5 mi. east of the city, 1 mile from WXIL. All loggings are tr. EDT used, standard abbrev's used.

8/6
2311 WCPN 107.5 MI Detroit, \$

2315 WNUZ 103.5 MI Detroit, \$
2325 WDET 101.9 Detroit, \$

2332 WCYZ 95.5 as above

8/8
0006 WNGO 106.1 MD Cumberland, rare

6/12 Es
1008 WJIP 98.9 KY Paintsville, E KY nx 1065

1013 WJUB 88.5 OH Oxford, OH nx 1045
1015 f/outa

1130-1155 unIDs 88-92 mostly 88-90, Ms GCI
1157 WGTD 91.1 WI Kenosha, nx, ID 1085

1159 WPM 89.3 WI Green Bay, ID 1190
WIAA 88.3 MI Interlochen, ID 1255

1205 f/outa
6/13 tr

0641 KLUW 99.9 TX Wichita Falls, ads 305
0649 KTXK 88.1 TX Lubbock, psa's, ID 340

0659 KENW 98.5 NM Portales, nx, ID 430
0930 KQIP 96.9 TX Odessa, town ID 280

0934 KYKK 94.1 NM Humble City, ID, "rock-94"
Es

1145 unIDs to 98's Spanish unIDs 88.9, 90.9
1155 TGRT- 88.8 Gva Guatemala City, nx 1120

1156 TGY- 98.6 Gva Guatemala City, nx
1253 TG-- 88.1 Gva Guatemala City, nx

(1255-1315, lull) then much the same to
1330 f/outa

2125 KCSN 88.5 CA Northridge 1210
2127 KLCN 88.1 CA Long Beach 1180

KSDS 88.3 CA San Diego 1120
2128 KPST 94.1 CA San Diego, c 1120

KPCST 89.3 CA Pasadena 1185
KXLU 88.9 CA Los Angeles 1190

KCRW 89.9 CA Santa Monica 1200
2135 KSPC 88.7 CA Claremont, town ID 1160

KPFK 90.7 CA Los Angeles 1190
KFAC 92.3 CA Los Angeles, c

KJOI 98.7 CA Los Angeles, m
2139 KROQ 106.7 CA Pasadena, r 1185

2143 XETRA 91.1 BCN Mexicali, r 1100
2200 XHIS 90.3 BCN Mexicali

2203 KWI 96.7 CA Santa Ana, area ad 1165
KXXY 96.5 CA San Diego, local ad 1120

KIPMT 98.1 CA San Diego 1120
2210 f/outa

6/14 tr
0223 WAFB 98.1 LA Baton Rouge, ID 450

0604 KTXK 88.1 TX Lubbock, ID 340

6/15 Es
-busy on 6-m with opening in the ARRL VHF cont.

1540-1700 unIDs to 107.9
1558 WQNA 107.7 NY Albany, area psa 2Es 1635

Sorry for not keeping the logs more updated, but not getting the new FM atlas until after mid-June did make for a backlog. I've still lots of C-90 tapes to go thru. During some of the good trop sessions (due to the heat wave these regions had then) I was off busy on 2-m trying to find some new states there. The same was true for some of the higher-MUF Es openings. I'm sure a lot was missed on June 15th due to the contest participation (50-MHz had lots of 2 Es into New England). 73, Pat

Randall B. Clark, Rt. 9, Box 231 (Dutch Ridge), Parkersburg, WV 26101 - Aug. 6 to Sept. 4

Equipt: Realistic STA-42 with a 3 ft. long twin lead up at 45 ft. AGL, 5 mi. east of the city, 1 mile from WXIL. All loggings are tr. EDT used, standard abbrev's used.

8/6
2311 WCPN 107.5 MI Detroit, \$

2315 WNUZ 103.5 MI Detroit, \$
2325 WDET 101.9 Detroit, \$

2332 WCYZ 95.5 as above

8/8
0006 WNGO 106.1 MD Cumberland, rare

8/9
1200-1611 WXIL off thus hearing various re-

logs. Our power was out from 1739-2034
thus missing an Es opening. DRAT!

6/19
0945 WDET, 0957 WHPF & WQMG 1000

cont....

8/19 tr
2212 CBCL 93.5 OM London
2230 WWMN shocks me as they ID! rare!
2256 CJBX 92.7 OM London, tent.
8/23
2358 WOCN 101.7 OM Urbana + others
8/25
0205 KNWS 101.9 IA Waterloo, in w/brief w/ temp figures, etc. not me.
2130 KUNI 90.9 IA Cedar Falls, called Neil Dickerson, but he naturally had nothing.
2145 KOEL 92.3 IA Oelwein, w/t ck CDT, tent.
2207 WKYB 93.9 DC Washington, d and u
2359 WHAD 90.7 WI Delafield

8/26
0104 CJBX 92.7 OM London
1930 KUNI 90.7 IA Cedar Falls
1923 CJOM 88.7 OM Windsor
1935 WONG 104.3 BOONING IN! \$
1947 CBCL 93.5 OM London

(WKIL, local, is moving to another site by mid-month, with rumored new format plus possible mass firings. WKIL has had more crap going on than any other I know.)

Hi there! How can you sum up this year's skip ex?...well I just did!...anyway I'm at least 150+ this year past 500 now, Neil Dickerson says ex are exactly like a typical winter morning (it will be winter by the time you read this!)

I would still be interested in hearing from those who are into the station FR collecting bis as I have PLENTY of area stickers, etc....come on, WV has not to be a rare state for stickers! I am especially interested in collecting t-shirts put out by the various stns (medium size) also have two shirts for trade, WMMR-med & WFLJ-large.

Aug. 15, met WTPDA'er Bill Wurtsel NY, NY at our bus depot while Paul Mount was going through the area, it was really nice meeting you, Bill, a real surprise indeed!!

Wishing to each the best of DX! Sincerely, Randall B. Clark

Rick Sanford, 404 S. McNeill, Burnet, TX 78611 - Aug. 6 to Sept. 7 CDT

8/11 tr
2355 KRCT 94.3 TX Ocala, r, heard only once before in April 1978.
KPPH on while KRCT + KLEK were heard

I spent less time DXing during the period covered in this report than I have for any other time since I installed my rotor in the summer of '77, so the poor results should be no surprise. The most interesting catches were a couple of 94.3s in the 150-200 m. range, that were heard while remnants of "Allen" were to the southwest of them, in New Mexico. KLEK held the distinction of being my most highly sought station, since it was the only operating commercial station in South Texas not logged here. I didn't check enough to know the real extent of the coastal tr. However, I did catch the tail end of two weak openings out to around 500 miles. These produced only a few relogs and nothing beyond New Orleans and Jackson. With cooler weather just around the corner, the tr should begin to pick up this fall and maybe surprise us all during the winter.

Danny Buntin, 1312 N. Skyline, Stillwater, OK 74074 - Aug. 13 to Sept. 11 CDT

Equip: Pioneer TE-9100 tuner, Antennacraft 10 el. ant. up 30 ft. with rotator

8/16 tr
1016 KTCM 99.9 NM Clovis, ID, \$ 375
1018 KNUQ 99.1 NM Clovis
1104 KANZ 91.1 KS Garden City, ID, P 260
(also most of Lubbock & Amarillo in weak)

8/21 tr 160
0945 KUAF 88.9 AR Fayetteville, ID, 10wts.
1003 KNGK 91.3 OK Claremore, ID, in \$ 83
(new to the air, big band and contemp. ex 10 wts at 400', so should not be taken too lightly.) (Well enhanced ex this am)

8/26
2008 WETA 90.9 Simulating TV
2250 WOOD 105.7 MI Grand Rapids
2314 CHAY 93.1 OM Barrie

8/27
0049 CKPC 92.1 OM Brantford
1209 WKYS 93.9 DC Washington
1202 CJBX over WYHF

8/29
0106 WRQK 98.7 NC Greensboro +CKPC
all day same boring stuff

8/29
1159 WBAI 94.1 OM Cincinnati, \$
1203 WKRQ 101.9 OM Cincinnati, \$
1205 WBBN 102.7 OM Cincinnati, \$
2030-2201 WKPO off (92.1 Middleport)
2120 unID rock sts. +WFEM 2121

9/2
1900 WYYS 94.9 OM Fairfield, "yes-95" WMLV

9/3-4
2045-2110 KUNK back in! 2132-2156
0100 WRRM 90.9 WI Wausau, w/off of WI net

cont.

9/7 Es
1718 WQMI 102.9 VA Norfolk, ID 1100
1722 WRVQ 94.5 VA Richmond, ads, "Q"
1725 WSLQ 99.1 VA Roanoke, "Q-94" 970
9/7 Es
1727 WPVR 94.9 VA Roanoke, ID 970
1729 WAMU 88.5 DC Washington 1105
1746 WBOC 104.7 MD Ocean City, ad, ID 1220
1748 WKHI 99.9 MD Ocean City, ID

The great heatwave started to lose its grip here in mid-August as rainy weather gave way, and tr seemed to benefit from it some after a month long absence. The Aug. 21 tr was notable for penetrating further into southeastern New Mexico than the good June tropes were able to do in that area.

KSFT-FM of St. Joseph, MO did not change to KJJO as incorrectly reported in the Aug. column. Actually, KSFT was simulcasting with KJJO-AM at time of reception. 73.

NORTHERN FM DX (continued from page 23)

OCTOBER 1980

Neil G. Zank - 623 Lycrest Dr. - Lincoln, NE 68510
Equipment: Pioneer SX-750, Ten element Archer at 45 ft.

7/17 Es
WBBQ 104.3 Augusta, GA
WKTC 104.3 Tarboro, NC
WWSQ 104.9 Havelock-Cherry Point, NC
WQTI 103.1 Dunn, NC
WKLS 92.7 Dublin, GA
WVLV 94.5 Daytona Beach, FL
WREK 91.1 Atlanta, GA
WRAS 88.5 Atlanta, GA
WUSF 89.7 Tampa, FL
WJCT 89.9 Jacksonville, FL
WDEB 105.3 Macon, GA
WBJW 105.1 Orlando, FL
7/17 Es
WPMX 105.7 Statesville, NC
WAPA 92.5 Panama City, FL
WQDR 94.7 Raleigh, NC
KHAR 95.7 Winnsboro, LA
WLPB 96.1 Mobile, AL
WVIZ 92.5 Waterbury, CT
WAIL 92.7 Middletown, NY
WMTM 93.9 Moultrie, GA
WFDK 93.3 Manchester, GA
WBOB 94.9 West Yarmouth, MA
7/26 tr?
KOYE 94.9 Laredo, TX
Another widespread Es opening has netted me three new states, bringing total to 33 states heard. They include Georgia, Alabama & Louisiana. I received a phone call during evening of opening from Paul Mount in NJ checking in on his midwest receptions. Neil

TECHNICAL TOPICS



Q: "What are discone antennas? Are they any good for PSB DXing?"

A: Discones are basically ground plane vertical antennas with very broad frequency coverage. Several PSB monitor antenna manufacturers are offering discone designs for multi-band use, claiming coverage of all the major PSB bands with performance at least equal to that of a single ground plane cut for each band. As far as DX performance goes, keep in mind that any type of ground plane antenna may be fine for local monitoring, but your best bet for above-average results would be a yagi or log.

Q: "Can I use a UHF TV antenna for DXing UHF PSB? What kind would work best? What about impedance match?"

A: Stacked-bay type UHF TV antennas work extremely well for DXing UHF PSB, especially the 470-512 MHz "T" band (shared with UHF TV). Some types of 4- and 8-bay UHF antennas perform with good results on 450-470 MHz. However, they should be vertically mounted, not horizontally as for UHF TV. You can use a 300/75 ohm TV balun and low-loss coax for the run to your scanner. While there will be a mismatch between the 75 ohm coax and your scanner's 50 ohm input, the increased gain of the UHF TV antenna should give you much better DX results on UHF PSB than you've ever had before. Just as in UHF TV DXing, you should be careful to choose low-loss coax and a good balun, and get your antenna as high as possible. With the addition of a rotor, the increased gain and directivity of a UHF TV antenna can give you outstanding UHF PSB DX results.

WESTERN TV-DX

October 1980

This month we welcome Bill Heusmann and John Bell, to the column. I hope to hear from both of you regularly.
Vote Buck Pattin's 975 mile UHF logging, Alabama to Minnesota, on June 30.

New _____ New Mode _____ Tentative - t Unidentified - unid
Bill Heusmann, 698 Eighteenth St. #2, Des Moines, Iowa 50314 CDT

While I've been a member of WFDK since '68 or thereabouts, my apartment lifestyle has kept me from actively DXing since the early seventies. Now, I'm finally in my dream job at the Iowa Public Broadcasting Network operations department and planning to stay put for awhile. I'm also renting from a most amenable couple who let me put up a decent antenna system, discreetly tucked away in a far corner of their under-restoration Victorian house. It's also an excellent location as far as terrain; on a hill, overlooking the confluence of two rivers. For VHF, I purchased a Vineyard GE-4053, while still using a fifteen year old eight bay UHF antenna. Receiver is a 19 inch RCA color "portable." The low-band VHF receiver I used for F2 last sunset peak was stolen a couple years ago, my multi-band portable is dead on that band, so I've gotten none of the recent excellent European reception. Perhaps this fall... Current DX is as follows:

July 1980	August 1980	25 tr	21 WI
31 tr 2036 WKBD 50 MI 525	1 tr 0526 KELO 11 SD	2104 WKOW 27 WI	
WGPR 62 MI 525	0730 K33AA33 IA 95	2110 WEEK 25 IL	
WTVS 56 MI 525	4 tr 2000 K33--33 NE	2119 KDNL 30 MO 275	
WXON 20 MI 525	2110 KTSB 27 KS	2133 K74CO74 IA 95	
2041 WFOV 17 IL	2124 KBMA 41 MO KC41	2134 WCFB 38 IL	
2059 WQFC 38 IL 310	2145 KYFC 50 MO	2159 WGRF 39 IL INW	
2101 KTYN 12 IA	5 tr 0730 KCPT 19 MO	2202 WSNY 44 IL	
2122 WGEH 10 IL	0758 KCBJ 17 MO	2213 WCIU 26 IL	
2130 KRIN 32 IA	0759 K33AA33 IA	2216 KDUB 40 IA	
2131 KYIN 24 IA	2229 K33AB38 IA 160	2218 WTVS 56 MI	
2159 KXVE 19 NE	WICS 20 IL 250	2224 WCVB 24 WI	
2200 KTVQ 2 MT	10 Es 1037 WESH 2 FL	2230 WGVG 35 MI	
tr 2227 WICS 20 IL	25 tr 2030 WKAR 23 MI	2259 WTVF 47 IL	
	2059 KYFC 50 MO	2326 WFLD 32 IL	

I am well pleased with results in this location, especially on UHF. The effects, good and bad, of terrain and buildings are quite noticeable, with virtually nothing from the north toward crest of hill and apartments. I never expected to see so many translators so quickly. This bodes well for the future. 73, Bill

Pat Dyer, 5315 Silvertip Drive, San Antonio, Texas 78228 CST
Equipment: 9" d&w 1976 Penncrest (model 1001), Archer V-100 and 8-bay bow-tie UHF array at 20 feet with rotor

June 1980	1 Es	2 Es
1 tr 0910 WJTV 12 MS 525	(MUF 88.3 @ 1310)	1059 WGBD 2 SC 1120
Es 0930 unids 2,3 w	1858 WBTW 3 NC 1105	1100 WCIW 4 SC 1120
(tr CCI hvy)	(MUF 89.7 @ 1915)	(MUF 89.3 @ 1110)
1000 KNXT 2 CA 1190	2035 KTW 2 NY 1015	1159 WYAY 3 NC 1250
1020 KVOAT 4 AZ 750	(MUF 104.3 @ 2039)	(MUF 89.7 @ 1205)
1025 KPHOT 5 AZ 835	2200 KUTV 2 UT 1030	1258 WJSK 2 TN 1010
1029 KTVK 3 AZ 835	(MUF 104.3 @ 1410)	(MUF 104.3 @ 1410)
(MUF 98.7 by 1035)	2100 KTV 2 UT 1030	1259 WJTV 6 TN 1100
1215 KRMAT 6 CO 310	(tr CCI hvy)	1259 WJTV 6 TN 1100
1500 f/outs unid 2-5	2 tr 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100
1550-1750 unids 2-4	Es 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100
n., Canada	2 tr 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100
1759 WJSK 2 TN 1010	2 tr 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100
WNGE 2 TN 820	2 tr 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100
(WJSK-aud., WNGE-vld.)	2 tr 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100
1800 KDLO 3 SD 1070	2 tr 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100
1305 KFYR 5 ND 1200	2 tr 0910 KTV 2 UT 1030	1259 WJTV 6 TN 1100

Western TV DX

Pat Dyer (continued)

2 Es 2215 KOTA 3 SD 1040	6 tr 0559 KBIN 10 NM 440	13 tr 0659 KABC 28 TX 340
2315 apx f/outs	2350 KLRK 13 TX 340	KOCT 34 OK 420
3 tr 0448 KMID 2 TX 275	KFDW 12 NM 435	KOKR 25 OK 420
Es 1015 unids 2-4	7 tr 0030 KCHD 11 TX 340	0731 KTAB 32 TX 220
1029 WPMY 2 NC 1175	0036 KSW 8 NM 440	KLTST 24 LA 350
1058 WSAZ 3 NV 1100	0420 KPDA 10 TX 440	0817 KMID 2 TX 275
1128 KUTV 2 UT 1080	Es 1830-1850 unids 2,3	0829 KCHD 11 TX 340
(MUF 94.9 @ 1130)	2030-2050 unids 2,3	0929 KSW 8 NM 440
1225 f/outs unids 2ne	2058 KNXT 2 CA 1190	Es 1135 unid 6 ne
1330-1340 unid 2 ne	KNBC 4 CA 1190	(MUF 98.6)
2005-2030 unid 2,3	2059 KEYT 3 CA 1270	1145 TGV 3 GU 1120
2032 KDIK 2 ND 1225	(MUF 89.3 @ 2100)	YSU 4 ES 1200
2040 KOTAT 3 SD 1040	2130 f/outs	1205 YSR 2 ES 1200
2100 KTVQ 2 MT 1245	tr 2350 unids 7,9 Mexi.	1248 Cuba? 2
2205 KUTV 2 UT 1080	8 tr 0015 unids 9-11 Mex.	1250-1400 unids 2-4
2355 apx f/outs	Es 0025 unid 2 ne	Mexico
4 tr 0120 KTW 2 NY 1015	0845-0930 unids 2,3aw	2100 KNXT 2 CA 1190
tr 0420 KLTW 7 TX 280	1758-1950 unids 2,3aw	2115 KNBC 4 CA 1190
0445 KMID 2 TX 275	1957 KNXT 2 CA 1190	2123 KTLAT 5 CA 1190
Es 1305 unids 2 ne	1959 KVBC 3 NV 1050	(MUF 106.7 @ 2139)
1320 KTCAT 2 NY 1110	2025 KNBC 4 CA 1190	2150 XHAG 5 BCN1010
WCCO 4 MN 1110	2029 XHBC 3 BCN1010	2227 XHBC 3 BCN1010
1323 WISC 3 WI 1065	(MUF 89.9 @ 2035)	2250 unids 2,3 span.
1329 WITI 6 WI 1100	2120 apx f/outs	soon f/outs
1350 WTMJ 4 WI 1100	9 Es 0925 unids 2-4	14 tr 0527 KMID 2 TX 275
1358 WBAV 2 WI 1190	0929 WESH 2 FL 1055	0540 WGN 26 LA 510
(MUF 90.9 @ 1412)	WBAV 3 GA 1050	0629 KCRD 11 TX 340
1422 local 4 off, but	0930-1030 unids 2-5	Es 0755 WESH 2 FL 1055
no ID's of Es goodies	(MUF 101.5 @ 1032)	0857 WJXT 4 FL 1015
1430 WMT 2 IA 945	1145 WTVT 4 IN 950	0925 WCIW 4 SC 1120
1545 apx f/outs	1158 WTV 2 IN 935	0929 WGBD 2 SC 1120
1630-1645 unids 2,3	1159 WGLA 3 IL 935	0959 WSB 2 GA 880
1925-2210 unids 2-4a	(MUF 100.9 @ 1212)	1010 WSAV 3 GA 1050
2010 KVBC 3 NV 1050	1330 WMT 2 IA 945	1036 local 4 off 30a,
2050 KNBC 4 CA 1190	1331 KTV 3 MO 835	no ID's though
5 tr 0000 KCRD 11 TX 340	1345-1545 unids 2,3	1100 f/outs
KSW 8 NM 440	2020-2100 unids 2 ne	1800 unid 2 ne, brief
0009 KBIN 10 NM 440	2055-2200 unids 2,3aw	2030-2045 unids 2-4ne
Es 0150-0215 unids 2,3	11 Es 0925 unids 2-4	2117 WBAV 2 WI 1190
0220 WBBM 2 IL 1045	0930 WPMY 2 NC 1175	2129 WBBM 2 IL 1045
0221 unid 5	0959 WNGE 2 TN 820	to 0000 busy with 6m
0245 f/outs	1059 WBAV 2 WI 1190	in ARRL VHF contest
0800 KQTV 2 MO 750	1118 KDLO 3 SD 1070	15 Es 0030-0045 unid 2 ne
0930 f/outs ap	1129 KTCAT 2 MN 1110	0130-0140 unids 2,3 n
1655-1850 unids 2,3n	1155 f/outs	0145 Unids to 5 (all
tr 1859 KMID 2 TX 275	1405-15 unid 2	locals off)
6 tr 0014 KFWT 3 NM 430	12 Es 0805 unids 2-4	0148 KWGN 2 CO 810
0134 KTEW 2 OK 485	0825 unids thru 5	0200 KTVS 3 CO 815
0420 KLTW 7 TX 280	0859 WECT 6 NC 1250	0225 KUTV 2 UT 1080
0433 KPDA 10 TX 440	(MUF 107.9 @ 0913)	0300 apx f/outs
0434 WAFB 9 LA 450	1022 WSAZ 3 NV 1100	tr 0316 KTVY 4 OK 420
0440 KTVH 12 KS 590	1029 WDTN 2 OH 1075	0542 KSW 8 NM 440
0458 KWTW 9 OK 420	WCHT 4 OH 1135	KCHD 11 TX 340
0515 KLFY 10 LA 395	1043 WAVE 3 IN 945	0549 KABC 28 TX 340
0532 KCHD 11 TX 340	1050 WTVT 4 IN 950	Es 0850-1100 unids 2-6
KSW 8 NM 440	1058 WTV 2 IN 935	(MUF 98.1 by 1010)
KAMR 4 TX 440	(MUF 91.1 @ 1155)	again busy with 6m
0533 KOSA 7 TX 280	1225 f/outs	for contest
0540 KFDW 12 NM 435	2250-2255 unid 2 ne	1059 WESH 2 FL 1055
(solar flare ax 0542)	2310 unid 2 ne	1450-2020 unids 2-6
0558 KXOM 9 TX 295	13 tr 0050 KBMT 12 TX 275	(MUF 107.7 @ 1558)
0559 KLSK 13 TX 340	Es 0145-0210 unid 2 ne	1459 WBAV 2 MS 615
	(CB tp, no ID!)	1735 WJIN 6 MI 1200
		1930 WGLA 3 IL 935

Sorry for being so late with this, but I had to catch up on some of the FM logging tapes first. As you can see, a lot of stuff for just two weeks in June!

Trop openings (due to the heat-wave this area was having) very good, but I was busy trying to get some new states worked on 2m during a lot of that. Also, the trop CCI often masked ES MUF determinations - sometimes to the point where

EASTERN TV DX

OCTOBER 1980

Bill Fahber cont'

27 Tr 0305 WCTI-12 NC 330
W6AL-60 VA
XLTing WJZ-13
0319 WCHP-8 NC 350

27 Tr 2330 WAVY-10 VA 180
WJBT-12 VA 170
WJEX-8 VA 200
WVSC-13 VA 190

27 Tr 2330 WYAH-27 VA 180
WXTV-41 VA 115
28 0620 WTVB-11 NC 300

"KA2XEH, according to an

FCC list of translators, are the call letters of a 1 kw translator on ch. 56 in Washington, D.C., broadcasting signals from WJEX-41, San Antonio, Texas, which it receives by satellite. Why ham radio call letters I don't know. It's part of the Spanish International Network (no the translator doesn't translate into English). I refer to it as 56 SIN for short. 100 watt translators W4WAD, W4IAC, W6WAL & W2SAA are in Oranock, Virginia, on the peninsula. As you can see by my report, some of them work overtime. Must have been a hot tropo night in Oranock. A high pressure area over Pennsylvania for a few days (8/26-28) lived things up after two weeks of no skip. I have no record of a translator for WTVB-11, but at 0251 on Aug. 27 WTVB-11 had a CB/TP with a voice "now conducting translator tests" on audio. Two additions to my report in the July WUD, on May 29. WPTV-5 Florida was heard at 1730. The Miami-2 at 1800 was WPBT (It was UNIDed & could have been WTHS, which shares the channel). Both these were UNIDed, but I got WLS from them."

Richard Eckman 2328 Griffith St. Philadelphia, PA 19122 (MLT)

July
12 Es 1000 UNIDed-2 ABC
15 0930 WMT-2 IA
16 0925 UNIDed-2 PBS
1801 CJC-2 MS
1827 CJC-5 MS
MUF at 6
17 1012 KATV-2 MO
WDAF-4 MO
KCOB-5 MO T
1032 KSDK-5 MO T
1110 WMT-2 IA
1130 CJC-4 MS
1143 WCOB-4 MN T
1145 UNIDed-5 CBC
1146 KTVI-2 MO
1200 CJC-5 MS T
1215 KETS-2 AR

17 Es 1215 KARR-4 AR
1401 WMBF-4 IL
Bock Island
1450 MUF at least
103 KHS
1535 KTVI-4 OK
KCOB-5 OK T
KTEM-2 OK T
1820 KTCB-2 MN
WCOB-4 MN
1822 KSTP-5 MN
1850 KCON-5 SD
1913 WTHJ-4 WI
19 1530 CJC-4 MS T
CJC-5 MS T
1845 WNL-4 IA
0025 KTVI-2 MO
20 0025 KTVI-2 MO
21 0903 UNIDed-2 PBS

22 Es 2132 UNIDed-4 CBS
26 0906 WBRZ-2 LA
0903 Cuba-3
0915 Cuba-5
0916 Cuba-4
0917 WESH-2 FL T
KCOB-5 OK T
0920 WPBT-2 FL
1900 WBRZ-2 LA
1917 WMB-2 MS
1923 WPBT-2 FL T
1930 WGBI-4 MS
1932 KALB-5 LA
1958 WNL-4 LA
August
1 Es 0928 WBRZ-2 LA
1755 WPBT-2 FL
WTVJ-4 FL
Cuba-5 T

"That's all to date. 7/17 was about the best day for Es this season with Apennines all day long to many areas and MUFs well into the 7th band. It was interesting seeing live olympic coverage from Cuba on July 26. I was probably the only person in the country able to see the Olympics live on TV!"

Frank Wheeler 6589 Wattsburg Rd. Erie, PA 16509 (EDT)

July
28 Es 1929 WBRZ-2 LA 1020
2100 KCKT-2 MS 1015
2230 KUSD-2 SD 851
29 1330 KDIK-2 MD 1169
30 1501 KATC-3 IA 1056
1530 KETS-2 AR 825

AUGUST
6 Tr 0800 WNDU-16 IN 318
0950 WUOH-19 MI 220
8 Es 1600 WBRZ-2 LA 1020
19 Tr 1222 WCMU-14 MI 262
1830 WGPB-62 MI 154
20 Es 0001 KARD-3 MS 953

26 Tr 0829 WILX-10 MI 236
0630 WJHM-6 MI 232
0633 WITI-5 MI 410
1628 WOBH-7 MI 338
2132 WJRN-3 MI 431

"Sorry I didn't get to the

Wed. nights all the time, but that week the boss asked me to work Fri. 11:30 PM until 6:00 AM Sat. the first time since last Thanksgiving, so I missed the conv. The first time it was at Bob's that I didn't get there for at least on a Sat. Too bad the weather was so bad for the conv. Hope nobody got drowned out, hi. Trust you all had a good time regardless of the weather. I also noticed that the DX wasn't too good that weekend (yes, but with Bob's set-up you don't need good ex, ed.)."

Robert S. Ross Box 4373, Stn. C London, ON N5M 5J2 (EDT)

July
2 Tr 0700 WILX-10 MI
0701 WTO-11 OH
0706 WNEH-5 RI
0708 WDIY-4 MI
WNYC-3 OH
0709 WJBR-2 MI
0711 WXYZ-7 MI
0722 WTVS-56 MI
0723 WKBD-50 MI
1247 WUAB-43 OH
6 Es 1429 KTVS-3 CO

6 Es 1450 KLINE-3 NE
1510 KWGN-2 CO
1602 KTMW-2 WY
KDIK-2 MD
9 2333 CMT-47 OH
10 Es 1328 WPBT-2 FL
14 Tr 2316 WTVQ-36 KY
16 0510 CPTO-9 ON
0542 WTVS-13 ON
0543 WJAN-17 OH
WBTI-25 MI
0544 WUHL-41 MI

16 Tr 0610 WJRT-12 MI
0612 WLD-35 OH
0639 WAKR-23 OH
0701 WPTT-55 IN
0751 WBGU-97 OH
0753 WVEZ-25 OH
17 Es 2338 KTMW-2 OK
16 Tr 0754 WMB-40 IN
21 0605 WMB-5 IN
23 Es 0005 WJVM-2 WY
29 Tr 0250 KTMW-6 MI
30 Es 2030 KOTA-3 SD

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Saul Chernos c/o P.O. Burnt-River, Ont. K1M 1G9 (EST/EDT)

Toronto DX
January
6 Es 1300 WMB-2 MS
KATC-3 LA
1400 KFDX-3 TX
May
17 Es 1520 WESH-2 FL
Burnt River DX
June
14 Es 1458 WCIV-4 SC
1503 WPTV-5 FL
Tr 1630 WSTM-3 NY
Toronto
17 Es 2057 KOTA-3 SD
2156 WNL-4 LA
2159 WPBT-2 FL
2200 WBAR-3 FL
Tr 2250 WYNY-7 NY
Es 2310 KTMW-2 WY

17 Tr 2355 WQLN-54 PA
18 0030 WNPB-16 NY
Burnt River DX
27 Tr 1830 WMTV-9 MI
1900 WFB-7 MI
July
2 Tr 2200 WJBK-2 MI
WDIV-4 MI
WJKN-8 OH
2100 WJBR-2 MI
WKYC-3 OH
WDIV-4 MI
WEMS-5 OH
16 Es 2200 WLBZ-2 ME
GJCB-4 MS
WABI-5 ME
WGBH-6 ME
17 Es 1430 UNIDed-6 LA

17 Es 1830 KMOS-6 MO
KMTV-2 MO
KFSH-5 AR
27 Tr 1800 WSTM-3 NY
30 Es 1900 WPBT-2 FL
1945 WESH-2 FL
2000 WEDU-3 FL
WTVS-4 FL
August
2 Tr 0950 WJXT-9 NY
1000 CBFT-7 ON
CBFT-12 ON

Paul Gaines % C.P. Cleaning 15920 Detroit, MI 48227 (EST/EDT)

February
23 Es 0252 MSB-2 GA 600
March
10 Es 0515 WDAF-4 MO 625
19 0321 KDFW-4 TX 1000
25 0452 WCOB-4 MN 525
Minneapolis
29 0500 WTVY-4 AL 790
April
7 Es 0459 WDAF-4 MO 625
May
23 Es 0516 WDAF-4 MO 625
27 Tr 0758 WBOY-12 NY 260
0947 WBTI-64 OH 235
Cincinnati
29 0224 WOKX-13 WY 280
Es 2300 KFDX-3 TX 1000
2339 KDAA-5 CO 1145
30 0044 KTVS-3 CO 1025
0236 KDUH-4 NE 975
2100 KALB-5 LA 915
2200 KATC-3 LA 970
June
4 Tr 2229 WILX-12 IL 305
5 0003 WAND-17 IL 340
0212 WREX-13 IL 300
0239 KFSV-12 MO 475
0253 WHAS-11 KY 310
0313 WTVF-5 TN 475
0318 WSN-4 TN T
0319 WNGE-2 TN 475
1216 KTHV-11 AR 715
0903 WILX-11 IL 305
15 Es 1907 KENS-5 TX
1924 KIII-3 TX T
1950 KRTS-6 TX T
16 1218 KATC-3 LA T
2204 KBTX-3 TX 1070
2205 KOET-3 OK 820
2208 KFDX-3 TX
17 Tr 0845 WILX-11 IL 305
Es 1155 GJCH-11 MS 970
1210 CBRT-3 MS 970
18 0225 CKCK-2 GA 1150
1215 KRGV-5 TX 1380
1239 KAVE-6 MS 1320
1240 KETS-6 TX 1280
1350 KENS-5 TX 1220

18 Es 1412 KTES-3 LA 905
1500 KBTX-3 TX 1070
2108 KOET-3 OK 820
2118 KARD-3 KS 810
2124 KXAS-5 TX 1025
2308 KFDX-3 TX 1000
2319 WBAR-3 FL 870
19 1507 KXAS-5 TX 1025
1510 KAVE-6 MN 1320
1540 UNIDed-5 Cuba
1600 KENS-5 TX 1220
1630 KTES-3 LA 905
1657 KATC-3 LA 970
20 1238 KOTA-3 SD 995
2057 KTES-3 LA 905
0223 KTMW-2 WY 1155
0237 KMCN-2 CO 1125
Denver
23 0038 KBTX-3 TX 1070
1158 KARD-3 KS 810
0100 KYCU-5 WY 1090
0125 KOTA-3 SD 995
28 Tr 0127 KFSV-12 MO 475
2215 WILX-12 IL 305
29 0202 WILX-11 MI 275
July
1 Tr 1037 WTVF-5 TN 475
1218 WDRF-12 TN 525
3 0052 WUHF-31 NY 280
Bochester
0123 WOKR-13 NY 280
0150 WFCB-40 PA 235
Greensburg
0240 WTVH-5 NY 350
0548 WNBC-10 NY 280
0554 WENG-12 NY 365
0629 CHEX-12 ON 270
0828 W6AK-64 OH 125
1003 WNPB-16 NY 375
4 Es 0315 CKCK-2 GA 1150
7 Tr 0803 WTVQ-36 KY 305
Lexington
8 0246 WTHI-10 IN 290
9 0233 WREX-13 IL 300
0308 WISC-3 WI 315
Madison
10 2325 WTHI-10 IN 290
0209 KFSV-12 MO 475
0215 KRCG-13 MO 530

11 Tr 0230 WHAS-11 KY 310
0257 KTVI-2 MO 450
St. Louis
0316 WCIA-3 IL 305
0337 WAND-17 IL 340
0342 KPLR-11 MO 450
0423 WAVE-3 KY 310
12 2227 KFSV-12 MO 475
13 0244 WAND-17 IL 340
14 0308 KPLR-11 MO 450
0340 WISC-3 WI 315
0803 KATC-3 LA 905
0833 WILX-12 IL 305
0855 KFSV-12 MO 475
1145 WTHI-10 IN 290
1311 WFSB-6 KY 465
Paducah
KSDK-5 MO 450
2226 WTVQ-36 KY 305
2232 WYTT-27 KY 305
2234 WLSB-46 KY 305
2238 WLEX-18 KY 305
2255 WOKX-13 WY 280
2311 WBOY-12 WY 260
2323 WML-33 WY 280
15 0028 WCHS-8 WY 290
0222 WREX-13 IL 300
0229 WHAS-11 KY 310
0300 WISC-3 WI 315
0317 KPLR-11 MO 450
0815 WTHI-10 IN 290
0818 KETC-9 MO 450
0830 WILX-12 IL 305
16 0000 WTVS-10 MI 245
Milwaukee
0247 WISC-3 WI 315
0304 WSAU-7 WI 360
0318 WML-7 IA 450
0340 CBFT-2 PA 515
17 Es 1226 KENS-5 TX 1220
1231 WEDU-3 FL 1000
1236 KATC-3 LA 970
1308 WDSU-6 LA 940
1319 KNOI-4 TX 1220
1425 WKRG-5 AL 855
2116 KXAS-5 TX 1025
2256 KMR-5 MI 1335
2310 KARD-3 MS 810
18 0256 WILX-11 MI 275

EASTERN TV DX

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Tim Cronin cont.

appearance by two Peoria stations, and the usual regular appearances by WTKJ-4. Hoping, but after looking at records from past seasons, not expecting, more Es. 73." (Tim, WTV 4 is in Bloomington, not Indy. That is why I left the mileage you reported out. Bloomington would be about 30 miles further, ed.)

Rampulus Kampattall 4639 N. Albany Chicago, IL 60625 (CMT) (312) 463-4334

August	22 Tr 0629	WGBU-14 MI 200	24 Tr 2058	WGBU-14 MI 200
12 Tr 2306	WGBU-57 OH 200	0750 W39AA-39 IN 145	WGBU-57 OH 200	WGBU-57 OH 200
	WLIO-35 OH 200	2050 WGBU-30 OH 220	2200 WGBU-57 OH 200	WGBU-57 OH 200
13	0035 WTVG-13 OH 220	2147 WGBU-57 OH 200	2343 WKY-32 KY 277	WGBU-57 OH 200
	0456 WDIV-4 MI 240	0005 WKEF-22 OH 237	2346 K33AA-33 IA 258	WGBU-57 OH 200
	0458 WTVG-13 OH 220	WIFB-49 IN	0444 WBN-10 OH 280	WGBU-57 OH 200
	WJOL-11 OH 220	0015 KYIN-24 IA 307	0452 WJOL-6 MI 335	WGBU-57 OH 200
	WJHO-24 OH 220	KRIN-32 IA 240	0517 WJOL-8 MI 230	WGBU-57 OH 200
0745	WGBU-57 OH 200	0120 WTVG-13 OH 220	0519 WJOL-12 MI 332	WGBU-57 OH 200
18	1949 WEYI-25 MI 222	WJOL-35 OH 200	0837 KYIN-24 IA 307	WGBU-57 OH 200
	WJOL-19 MI 233	WJOL-35 OH 200	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-30 OH 220	0937 KYIN-24 IA 307	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-14 MI 200	KHIN-36 IA 398	WJOL-35 OH 200	WGBU-57 OH 200
	2130 WJOL-24 OH 220	1825 KYIN-24 IA 307	WJOL-35 OH 200	WGBU-57 OH 200
	2155 WJOL-43 OH 293	WJOL-25 MI 222	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-25 OH 320	WJOL-13 MI 285	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-57 OH 200	WJOL-28 MI 310	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-54 PA 398	1858 WJOL-31 MI 230	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-22 PA 418	1906 WJOL-19 MI 230	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-13 OH 220	1931 WJOL-20 MI 220	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-53 PA 418	2008 WJOL-36 IA 398	WJOL-35 OH 200	WGBU-57 OH 200
23	2321 CKOO3-42 ON 260	KDNL-30 MI 265	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-35 OH 200	2020 KCP-19 MI 424	WJOL-35 OH 200	WGBU-57 OH 200
2331	WJOL-50 MI 240	2029 KYFC-50 MI 424	WJOL-35 OH 200	WGBU-57 OH 200
2337	WJOL-27 OH 347	2038 KTVJ-16 MI 496	WJOL-35 OH 200	WGBU-57 OH 200
19	0023 WJOL-11 OH 220	2052 KGBJ-17 MI 327	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-7 MI 240	2055 KGBJ-21 MI 440	WJOL-35 OH 200	WGBU-57 OH 200
0026	WJOL-48 ON 287	2100 KJIN-21 IA 335	WJOL-35 OH 200	WGBU-57 OH 200
	CBEFT-78 ON 245	K33AA-33 IA 258	WJOL-35 OH 200	WGBU-57 OH 200
0032	WJOL-12 MI 224	2130 KJIN-27 IA 462	WJOL-35 OH 200	WGBU-57 OH 200
0419	WJOL-24 OH 220	KHIN-36 IA 398	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-7 MI 240	2147 KJIN-10 MI 292	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-5 MI 233	2200 WJOL-8 MI 230	WJOL-35 OH 200	WGBU-57 OH 200
0423	WJOL-3 OH 307	2208 WJOL-36 MI 325	WJOL-35 OH 200	WGBU-57 OH 200
0431	WJOL-4 MI 240	2325 KJIN-12 IA 202	WJOL-35 OH 200	WGBU-57 OH 200
0454	WJOL-43 OH 293	0032 KJIN-43 MI 424	WJOL-35 OH 200	WGBU-57 OH 200
0721	WJOL-54 PA 398	0037 K33AA-33 IA 258	WJOL-35 OH 200	WGBU-57 OH 200
	CKOO3-42 ON 260	KLING WJOL-12	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-35 IA 398	0120 WJOL-11 MI 360	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-29 MI 460	0144 WJOL-7 MI 220	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-22 PA 418	0201 WJOL-10 MI	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-29 MI 231	0210 KJIN-27 MI 440	WJOL-35 OH 200	WGBU-57 OH 200
0735	WJOL-27 OH 347	0214 KJIN-27 MI 440	WJOL-35 OH 200	WGBU-57 OH 200
2038	WJOL-54 PA 398	0244 WJOL-7 IA 240	WJOL-35 OH 200	WGBU-57 OH 200
2046	WJOL-30 OH 220	0245 WJOL-13 IA 315	WJOL-35 OH 200	WGBU-57 OH 200
2110	WJOL-24 OH 220	0326 KJIN-12 MI 332	WJOL-35 OH 200	WGBU-57 OH 200
0720	KJIN-24 IA 307	1713 KYIN-24 IA 307	WJOL-35 OH 200	WGBU-57 OH 200
	KJIN-21 IA 335	1800 WJOL-31 MI 230	WJOL-35 OH 200	WGBU-57 OH 200
	KJIN-32 IA 240	WJOL-19 MI 230	WJOL-35 OH 200	WGBU-57 OH 200
0747	KDNL-30 MI 265	WJOL-62 MI 240	WJOL-35 OH 200	WGBU-57 OH 200
0754	K33AA-33 IA 258	WJOL-56 MI 240	WJOL-35 OH 200	WGBU-57 OH 200
2228	WJOL-19 MI 257	WJOL-54 PA 398	WJOL-35 OH 200	WGBU-57 OH 200
	KDNL-30 MI 265	CKOO3-42 ON 260	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-49 MI	1817 WJOL-20 MI 240	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-36 MI 314	WJOL-35 PA 398	WJOL-35 OH 200	WGBU-57 OH 200
2235	WJOL-48 OH 250	1824 CIOO-59 OH 287	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-64 OH 250	1825 CBLPT-48 OH 287	WJOL-35 OH 200	WGBU-57 OH 200
2240	WJOL-22 OH 237	1826 CKGN-29 OH 260	WJOL-35 OH 200	WGBU-57 OH 200
2315	WJOL-14 MI 267	WJOL-19 MI 230	WJOL-35 OH 200	WGBU-57 OH 200
2330	WJOL-55 MI	WJOL-19 MI 230	WJOL-35 OH 200	WGBU-57 OH 200
21	0005 WJOL-32 MI 277	WJOL-36 IA 398	WJOL-35 OH 200	WGBU-57 OH 200
2305	WJOL-19 MI 219	2023 WJOL-20 MI 220	WJOL-35 OH 200	WGBU-57 OH 200
2326	KDNL-30 MI 265	2052 KJIN-21 IA 335	WJOL-35 OH 200	WGBU-57 OH 200
22	0620 WJOL-29 MI 231	2058 KJIN-30 MI 265	WJOL-35 OH 200	WGBU-57 OH 200
	WJOL-25 MI 222	KJIN-32 IA 240	WJOL-35 OH 200	WGBU-57 OH 200

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Robert Kramer cont.

26 Tr 0437	CKOO3-42 ON 260	5 Tr 1859	WKEF-22 OH 237	10 Tr 0755	WJOL-20 MI 220
WJOL-4 MI 240		1902	WJOL-20 MI 240	2300	WJOL-19 MI 220
0439	CFTO-9 OH 440		WJOL-24 OH 220		
0441	WAKR-23 OH 307		WJOL-50 MI 240		
0442	WJOL-7 MI 460	1917	WJOL-59 OH 200		
	Buffalo	1942	WJOL-35 OH 200		
0510	WJOL-12 MI 224		WJOL-56 MI 240		
0517	WJOL-43 OH 293	1946	WJOL-13 OH 220		
0519	WJOL-29 OH 260	1950	WJOL-53 IA 418		
0535	WJOL-14 MI 200	1951	WJOL-43 OH 293		
0546	WJOL-11 MI 318	1952	CKOO3-42 ON 260		
0546	WJOL-29 MI 460	1954	WJOL-22 IA 418		
0733	WJOL-54 PA 398	1955	WJOL-28 MI 224		
0739	WJOL-47 OH 440	2012	WJOL-40 PA 418		
	CBLPT-25 ON 440		WJOL-14 MI 200		
1715	WJOL-25 MI 224	2141	WJOL-35 PA 398		
	WJOL-56 MI 240		WJOL-54 PA 398		
	WJOL-20 MI 240	2143	WJOL-59 OH 287		
1717	WJOL-50 MI 240	6	0018	WJOL-32 IA 440	
	WJOL-56 MI 240		WJOL-27 IA 462		
	WJOL-19 MI 233	0026	WJOL-32 IA 435		
	WJOL-30 MI 265		WJOL-36 IA 398		
1719	WJOL-40 OH 338	0031	WJOL-13 IA 315		
1744	WJOL-59 OH 287	0035	WJOL-14 IA 462		
1745	WJOL-29 MI 460	0137	WJOL-11 OH 220		
	WJOL-54 PA 398	0343	WJOL-11 OH 488		
1733	WJOL-54 PA 398		"Snow Free"		
1734	WJOL-54 PA 398	0446	WJOL-11 OH 220		
1748	WJOL-13 OH 220		WJOL-4 MI 240		
1755	CBLPT-48 ON 287	0509	WJOL-20 MI 240		
1830	WJOL-29 OH 245	0516	WJOL-7 MI 240		
1847	WJOL-47 OH 440	0518	WJOL-25 MI 222		
1852	WJOL-57 OH 200	0708	CKOO3-42 ON 260		
	CBLPT-48 ON 260	1741	WJOL-19 MI 230		
	CITY 79 OH 440		WJOL-31 MI 230		
1917	WJOL-43 OH 293	1747	WJOL-13 MI 285		
2019	WJOL-19 MI 233	2006	WJOL-55 MI		
2027	CBLPT-25 ON 440	2008	KDNL-30 MI 465		
2100	WJOL-19 OH 440	2010	WJOL-36 MI 325		
2334	WJOL-28 OH 336	2141	WJOL-30 OH 220		
0710	WJOL-20 MI 240	0230	WJOL-22 OH 237		
	WJOL-54 PA 398	0252	WJOL-24 OH 220		
	WJOL-54 PA 398	0305	WJOL-23 OH 307		
0730	WJOL-54 PA 398	0319	WJOL-17 OH 340		
September		0320	WJOL-56 MI 240		
3 Tr 2103	CKOO3-42 ON 260	0329	WJOL-24 PA 398		
2208	WJOL-30 OH 220	0435	WJOL-4 MI 240		
2226	WJOL-57 OH 200		WJOL-12 OH 250		
2141	WJOL-27 MI 460	0447	CKOO3-42 ON 260		
2339	CIOO-59 OH 287		WJOL-7 OH 237		
2142	KYNE-26 MI 438		WJOL-19 MI 257		
	Omaha		0504	WJOL-7 MI 240	
	"Local WJOL was off"		0509	WJOL-43 OH 293	
2202	WJOL-32 IA 240		0512	WJOL-20 MI 240	
2218	WJOL-32 IA 435		0519	WJOL-11 PA 418	
2228	KJIN-12 IA 202		0526	WJOL-4 OH 280	
0727	WJOL-30 MI 265		WJOL-11 OH 220		
0730	WJOL-30 MI 265		WJOL-13 OH 220		
0734	WJOL-7 MI 315		WJOL-35 OH 200		
0740	WJOL-43 OH 293		WJOL-19 MI 257		
1301	WJOL-30 MI 265		WJOL-43 OH 293		
1302	WJOL-30 MI 265		WJOL-43 OH 293		
1303	WJOL-30 MI 265		WJOL-43 OH 293		
1304	WJOL-30 MI 265		WJOL-43 OH 293		
1305	WJOL-30 MI 265		WJOL-43 OH 293		
1306	WJOL-30 MI 265		WJOL-43 OH 293		
1307	WJOL-30 MI 265		WJOL-43 OH 293		
1308	WJOL-30 MI 265		WJOL-43 OH 293		
1309	WJOL-30 MI 265		WJOL-43 OH 293		
1310	WJOL-30 MI 265		WJOL-43 OH 293		
1311	WJOL-30 MI 265		WJOL-43 OH 293		
1312	WJOL-30 MI 265		WJOL-43 OH 293		
1313	WJOL-30 MI 265		WJOL-43 OH 293		
1314	WJOL-30 MI 265		WJOL-43 OH 293		
1315	WJOL-30 MI 265		WJOL-43 OH 293		
1316	WJOL-30 MI 265		WJOL-43 OH 293		
1317	WJOL-30 MI 265		WJOL-43 OH 293		
1318	WJOL-30 MI 265		WJOL-43 OH 293		
1319	WJOL-30 MI 265		WJOL-43 OH 293		
1320	WJOL-30 MI 265		WJOL-43 OH 293		
1321	WJOL-30 MI 265		WJOL-43 OH 293		
1322	WJOL-30 MI 265		WJOL-43 OH 293		
1323	WJOL-30 MI 265		WJOL-43 OH 293		
1324	WJOL-30 MI 265		WJOL-43 OH 293		
1325	WJOL-30 MI 265		WJOL-43 OH 293		
1326	WJOL-30 MI 265		WJOL-43 OH 293		
1327	WJOL-30 MI 265		WJOL-43 OH 293		
1328	WJOL-30 MI 265		WJOL-43 OH 293		
1329	WJOL-30 MI 265		WJOL-43 OH 293		
1330	WJOL-30 MI 265		WJOL-43 OH 293		
1331	WJOL-30 MI 265		WJOL-43 OH 293		
1332	WJOL-30 MI 265		WJOL-43 OH 293		
1333	WJOL-30 MI 265		WJOL-43 OH 293		
1334	WJOL-30 MI 265		WJOL-43 OH 293		
1335	WJOL-30 MI 265		WJOL-43 OH 293		
1336	WJOL-30 MI 265		WJOL-43 OH 293		
1337	WJOL-30 MI 265		WJOL-43 OH 293		
1338	WJOL-30 MI 265		WJOL-43 OH 293		
1339	WJOL-30 MI 265		WJOL-43 OH 293		
1340	WJOL-30 MI 265		WJOL-43 OH 293		
1341	WJOL-30 MI 265		WJOL-43 OH 293		
1342	WJOL-30 MI 265		WJOL-43 OH 293		
1343	WJOL-30 MI 265		WJOL-43 OH 293		
1344	WJOL-30 MI 265		WJOL-43 OH 293		
1345	WJOL-30 MI 265		WJOL-43 OH 293		
1346	WJOL-30 MI 265		WJOL-43 OH 293		
1347	WJOL-30 MI 265		WJOL-43 OH 293		
1348	WJOL-30 MI 265		WJOL-43 OH 293		
1349	WJOL-30 MI 265		WJOL-43 OH 293		
1350	WJOL-30 MI 265		WJOL-43 OH 293		
1351	WJOL-30 MI 265		WJOL-43 OH 293		
1352	WJOL-30 MI 265		WJOL-43 OH 293		
1353	WJOL-30 MI 265		WJOL-43 OH 293		

VHF UTILITY DX

Pat Dyer
5315 Silvertip Drive
San Antonio, TX 78228
Deadline: 5th of month

OCTOBER 1980

Sorry for the 2-month hiatus with the column. That was primarily due to a lack of report submissions by the membership. Also, the very good Es season on the TV/FM etc. kept me busy. (Some antenna damage from a mini-tornado of Hurricane Allen on Aug 10 didn't help things either!)

10.7-cm solar flux (not adjusted to 1 A.U.)

avg	smoothed avg	Some daily values in August were the lowest since Nov of 1978 (in the 120's).
May 224.6	Nov 196.8	
Jun 195.6	Dec 199.1	
Jul 185.7	Jan 199.4	
Aug 168.1	Feb 199.5	

General 50-MHz news - several days of multi-Es from Gibraltar to eastern US in June-July (once the beacon, 2B2VHF 50.035 fak, was heard in the Dallas area)...some late June multi-Es from WA,OR to Japan...late Aug and early Sept good nitely openings from Hawaii (KH6IAA) to S.Pacific (Papua New Guinea; Queensland,Australia etc.); some Jun-Jul multi-Es from KH6 to US.

Sheldon Remington, WB6WML, 102 Wreden Avenue, Fairfax, CA 94930 has been very busy on 50-MHz with a good Es season (using an IC-551, 10 watts, to a 5-element beam at 30 feet) - having heard 47 or 48 states in a 70- to 80-day period. Some of the better days of 2Es were:

May 29: east coast	Jun 18,19: east coast & HI
Jun 1,2: east coast & HI	Jun 20,21: east coast
Jun 4: east coast	Jun 22-24: east coast
Jun 15,16: east coast	Jul 23: east coast

via Glenn Hauser, Anthony Mann near Perth, Australia GMT used

4-20: 0545-0610 48.26 Zimbabwe (Rhodesia) Ch E2 video (5200 miles)
0600-0930 35.718 Zaire (in French) (6th harmonic)
-also, April and May daily 45.25 New Zealand video (3400 miles) and sometimes the 50.75 audio.
-local 30.850 2nd harmonic of VLW15 (2300-0941) might be a good target

George DuBois, 10048 NE Campaign, Portland, OR 97220 info from the P&TD in Australia confirmed that VL2AW on 39.25 is the State Electricity Commission in New South Wales - this was received daily in March. Also, a confirmation of the 33.16 Guam Cable TV service was obtained. Bearcat 220/250; A/S MON-8; PDT used (all are Es mode)

5-13:
2130-2210 K0B244 39.82 et al. Sheridan Co.,MT et al.
5-14:
1630-1900 K0F344 et al. 39.82 et al. Sheridan Co.,MT et al.

5-18:
1030-1040 39's L.A. Co.,CA
1923 K0B244 39.82 Miles City,MT (Mt.St.Helens ash-fallout warning!)

5-22:
1833 K0G381 39.82 Virginia City,MT

5-23:
2230 39's L.A.,CA

1905 KTB238 39.90 Lexington,NE	1921 KUA782 39.58 Great Bend,KS
KSN316 " Cambridge,"	1923 KAH700 " Lincoln,"
1907 KJJ400 " Benkelman,"	1940 42's CA-sp
1920 KAF490 39.58 Norton,KS	39's L.A.,CA-cp

VHF UTILITY DX

OCTOBER 1980

(DuBois cont.)

5-25:
1430 39's L.A. Co., Marin Co.,CA
6-18:
2201 40.9 Norton AFB,CA

7-26:

1030 41.42 Saskatchewan,Canada
1034 KAG390 39.90 Kimball,NE
1039 KAA852 " Alliance,"
1043 KAL219 39.58 Mesa Co.,KS

Now to my various loggings

2-meter (144 MHz), Swan 500 into a Swan TV-2C transverter (14-MHz i.f.) with an 11-element Cushcraft horizontal Yagi at 20' with rotor; GMT

5-25: good trop most of day into OK,KS areas
30: 0245-0400, various underdense Es scatter from S.CA
0400-0445, strong direct Es from Los Angeles-San Diego etc. lasting 30-45 seconds at a time (unstable MUF)

6-18: 1705, brief Es into Chicago

7-17: 1945-2205 very strong and mostly stable Es into OH,ONT,MI,IN,IL, WI,MM (some stations running only 10 watts)

18: 0045-0115 spotty Es into MI

for a total of 14 states & Canada worked since late May. A lot of trop is being missed due to the small and low antenna system. (though I've worked OK,KS,AR,NM,LA,TN & heard MO,IN,KY,AL that way - also QSO MS)

Bearcat 210 with 11-m ground plane at 14'; Hallicrafters SX-62, Allied A-2586 with 30' long wires at 12'; daily F2 MUF peak(s) noted (* Es, ba-backscatter) new underlined, GMT used

5-29:

0019 KLF527 35.22 Honolulu,HI-tp
0549 KGA805 35.22 Pittsburgh,PA-tp
0654 KIF651 35.58 Ft.Lauderdale,FL -tp

0724 KIN645 35.22 Miami,FL-tp
0729 KQK593 35.58 Cleveland,OH-tp
1432 KDK669 37.10 Strawberry Point,IA-p

1446 KBW426 37.10 Missouri Valley,IA-p

2020 38.3 Spanish

5-30:
0638 KFL943 35.58 Las Vegas,NV-tp
1540 KAA203 42.06 Kirkwood,MO-sp
1542 35.46 Los Angeles,CA-mp

1546 35.38 " " " "

1547 KSA908 39.50 Alledo,IL-cp

37.19 Spanish

5-31:

0602 KFL943
0729 KFL936 35.58 Phoenix,AZ-tp
1550 35.38 L.A.*; 1647 35.28 Sp.

6-1:

0320 KFL943

6-2:

1318 KFL943

6-4:

0030 35.28 Sp.; 0230 KFL943

1857 35.46 L.A.*; 1859 35.38 L.A.*

1940 37.19 Spanish

6-5:

0613 KIF508 35.22 Orlando,FL-tp

2040 38.5 Spanish

6-6:

0004 KLF527; 1915 38.5 Spanish

6-7:

0249 KFL943; 1630 39.98 Spanish

6-7:

1747 35.46 San Diego,CA-mp
2038 35.46 L.A.*; 2040 35.38 L.A.*
2107 KFL943

6-8:

0726 KFL936

KOE257 35.22 Phoenix,AZ-tp

0859 KIF651

6-9:

0543 KFL943; 1917 35.28 Spanish

6-10:

1510 KIN645; 2043 39.98 ss

2055 45 New Zealand TV videos

(sav test pattern on 45-MHz set!)

2058 46.25 Brisbane,Australia

(TV video)

6-11:

0250 KFL943; 2015 35.62 ss

6-13:

0449 KFL943; 1517 KIF651

1630 KQK884 35.58 Detroit,MI-tp

1955 38.5 Spanish

6-14:

0238 35.46 L.A.*; 0301 KFL943

0359 KFL936; 1350 KIF508

2030 35.46 L.A.*; 35.38 L.A.*

2111 KFL943; 2115 35.28 Spanish

6-15:

0912 KFL943

6-17:

2130 35.28 Spanish

6-18:

1945 40.86 Spanish

6-20:

0112 KLF527; 0128 35.28 Spanish

1450 KAA201 42.06 Macon,MO-sp

1910 35.28 Spanish

VHF UTILITY DX

OCTOBER 1980

(Dyer, cont.)

6-21: 0038 KLF527
0345 KQI316 33.90 Cincinnati, OH-f
0728 KFL943; 2100 35.28 Spanish
6-22: 1940 35.78 Brazil ?
6-23: 0940 KFL943; 1845 38.3 Spanish
6-24: 1512 KSA464 42.50 Pesotum, IL-sp
1520 " 42.06 Sarnia, ONT ?
2355 35.28 Spanish
6-25: 1248 KFL943 sp
1418 KAA202 42.06 Lee's Summit, MO-
1756 38.3 Ft. Riley, KS (range control)
2100 35.28 Spanish
6-26: 1745 35.28 Spanish; 1812 35.46 L.A.
6-27: 1900 35.28 Spanish
6-28: 0058 KTY508
6-29: 2155 35.28 Spanish
6-30: 1945 38.5 Spanish
7-1: 0135 KFL943; 2120 38.5 Spanish
7-3: 0055 38.5 Spanish
0102 KFL943; 2255 38.5 Spanish
7-4: 0028 KIM645; 0032 KFL943
2035 38.5 Spanish
7-5: 0252 KFL943; 1745 35.46 L.A.
2048 38.5 Spanish
7-6: 1935 38.5 Spanish
7-7: 1906 KFL943; 1925 35.28 Spanish
7-8: 2035 38.5 Spanish
7-9: 2020 38.5 Spanish
7-10: 0922 KTY508; 2125 38.5 Spanish
7-11: 2015 38.5 Spanish
7-14: 0000 35.22 bs; 0105 35.22 Spanish
2145 38.5 Spanish
7-15: 1825 35.28 Spanish
7-16: 0008 KFL943; 0054 KLF527
0131 KSG343 39.50 Macomb, IL-cp
1537 32.96 Spanish; 2125 KFL943
7-17: 0105 35.38 San Diego, CA-sp

7-18: 1947 35.28 Spanish
7-19: 2112 38.5 Spanish
7-20: 2300 32.96 Spanish
7-21: 0020 35.58 bs; 1658 35.28 Spanish
7-24: 0002 35.28 Spanish; 1830 35.28 Sp.
7-25: 0015 35.58 bs; 2015 38.5 Spanish
7-26: 2140 38.5 Spanish
7-27: 1920 35.28 Spanish
7-28: 1540 35.28 Spanish
7-29: 1940 38.5 Spanish; 2115 KFL943
7-30: 0106 KGA805; 0556 35.38 S. Diego
0558 35.46 L.A.; 0710 KFL943
2128 38.5 Spanish
7-31: 2030 38.5 Spanish; 2330 KFL943
2330 35.38 L.A.; 2331 35.46 L.A.
8-1: 0804 KFL943; 1953 38.5 Spanish
8-2: 1930 KFL943; 2005 38.5 Spanish
8-3: 1730 38.5 Spanish
8-4: 2035 38.5 Spanish
8-5: 0415 KFL943; 2000 38.5 Spanish
8-6: 1555 35.28 Spanish
8-7: 1855 38.5 Spanish
8-8: 1805 38.5 Spanish
8-9: 0052 KGA805; 1958 39.98 Spanish
8-11: 1358 KFL943; 1910 38.5 Spanish
8-12: 1720 35.28 Spanish
8-13: 1837 38.5 Spanish
8-23: 1815 38.5 Spanish
8-24: 1935 38.3 Spanish
8-25: 1955 38.3 Spanish
8-26: 2205 35.58 south (Brazil?)
8-27: 1800 38.5 Spanish
8-28: 0006 KFL943; 1955 38.5 Spanish

VHF UTILITY DX

OCTOBER 1980

(Dyer, cont.)

8-28: 1955 KFL943; 1957 35.46 S. Diego
8-29: 1445 low-30 Can. ne; US ne 31?
2111 46.74 Spanish
8-30: 1950 38.5 Spanish
8-31: 1330 KFL943; 1915 38.5 Spanish
9-1: 2005 38.5 Spanish; 2349 KIM645
9-2: 1619 KQC877 35.58 Cincinnati, OH-tp
1855 38.5 Spanish
9-3: 0021 KFL943; 2115 KLF527
2215 40.86 Spanish
9-4: 1318 KCG491 33.60 Wallingford, CT-f
1321 KCD575 33.70 Cheasire, " "
1322 KCD498 " Sandwich, MA-f
1330 KCF364 33.78 Brookline, " "
KCF366 " " "
KCF369 " " "
1337 KCA585 33.90 Plymouth, " "
1346 KB2283 " Orford, NH-rf
9-4: 1347 KCD353 33.70 Lancaster, MA-f
KCH677 " Fitchburg, " -cf
1349 KCA695 33.78 Manchester, NH-f
1400 KCE358 33.54 Shelburne, MA-cf
1402 KCB844 33.70 Greenfield, " -f
1421 KCC405 37.54 Bangor, ME-he
1423 KCA305 " Eddington, " -u
h1-37 US ne
1433 KFL943
1438 KCA346 37.54 Ellsworth, ME-he
1458 35.38 L.A.; 1506 35.46 L.A.
1513 KCF569 33.78 Tolland, CT-sf
1522 KCC825 33.70 Kennebunk, ME-f
1531 KDC288 33.90 Rolla, NH-f
1536 KCD346 " Tolland, CT-"
1537 KCB217 " Niantic, " "
1545 KDA381 " Wilton, NH-"
1546 KDA383 " Milford, " "
1952 46.74 Spanish; 2014 KLF527
2040 40.86 Bucaramanga, Colombia
9-5: 1947 41.62 Spanish; 2355 43.58 bs
9-6: 0315 KFL943; 1610 38.5 Spanish

f-fire	p-police	he-hydroelectric
cf-county fire	cp-sheriff	u-utility
rf-regional fire	sp-state police	tp-tone pager
sf-state fire		mp-mobile phone

With the hoped-for return of the fall F2 season, the 28.885 MHz 6-m information net is coming back to life again. For instance, via the net it was determined that the Sept 4 MUF from NY to AZ was over 39. That is a very high level for so early in the month.

After the below-par Feb-April 1980 season, one does get a little shy of making predictions based on the expected solar flux levels. Anyway, if the flux maintains enough days of over 200 in the fall there should be a fair amount of trans-Atlantic VHF F2 to keep many busy. However, this may well be confined to the US east coast areas, in regards to 50-MHz levels.

If Cycle 21 is on the way down (the Swiss, who will likely quit their sunspot counts at year's end - after over two centuries - maintain it is) there ought to soon come a lot of very energetic solar flares that will produce the "great magnetic storms" that the press has often been mentioning in connection with aurorae etc.

These large storms (i.e., A-Indices in excess of 100), depending upon the time of year and day they strike, can produce F2 MUF enhancements of many percent (particularly in north-south paths). These can literally make a solar flux of 100 almost act, for a time, like 200 etc. This is achieved in part by redistributing the existing ionization - and thus also creates large "voids" of low MUF at the same time.

So, don't give up on VHF F2 DXing just because the peak may be past and the solar flux is sliding down again - with the help of magnetic activity there should be enough interesting events in the next few years to come.

73, Pat WA5ITX

FM STATISTICS

October 1980

Fred Nordquist
7945 Boxford Road
Clay, NY 13041
Deadline: Dec. 5th

FM SCOREBOARD

DKer, Location	Rank	Total	88-92	Es	MS	Au	USA	CH	MI	PO	TPU	YS	As of:
Andy Bolin, Charleston, IL	1	2003	318	774	95	282	454	7	5	3	61	70	8/31/80
Bruce Klving, Duluth, MN	2	1449	124	680	8	88	444	3	1	0	49	48	11/6/79
Pat Dyer, San Antonio, TX	3	1336	166	1096	22	0	414	2	6	3	53	70	6/15/80
John Baling, Bloomington MN	4	1303	188	720	28	77	474	4	4	0	36	58	8/21/80
Mike Dalton, Clearwater FL	5	1195	246	699	7	0	414	2	12	12	68	72	6/21/80
Danny Buntin, Stillwater OK	6	1158	136	664	1	0	474	5	0	2	47	69	9/5/80
Fred Nordquist, Clay NY	7	1119	162	512	23	40	394	3	0	2	47	69	9/5/80
Peter Sawatsky, Guelph ON	8	1062	153	486	112	5	384	7	0	1	47	71	1/14/80
Mike Bogaj, Fairfield CT	9	1031	125	520	7	16	374	3	0	1	42	74	8/14/80
Fred McCormack, Des Moines IA	10	1028	131	775	25	77	444	6	3	0	54	65	8/3/80
Joseph Pala, S. Plainfield NJ	11	917	178	431	2	9	374	5	0	3	46	68	8/10/80
Ralph Strobel, Muncie IN	12	831	196	53	10	0	304	3	0	0	34	72	1/4/80
Roger Winsor, Hobart IN	13	807	160	211	0	0	32	1	0	3	36	60	3/30/80
Mark Holbrook, Chevy Chase MD	14	727	169	187	12	-	354	4	0	3	43	59	12/22/79
Tim McVey, Bolivar TN	15	705	89	155	2	0	39	4	2	0	46	77	8/1/80
Vernon Eaton, Benton AR	16	617	104	112	1	5	33	5	7	0	45	77	7/26/80
Richard Steinberger, Hudson MA	17	532	103	233	9	6	334	2	0	0	36	--	11/7/79
Joseph Smith, Johnson City NY	18	524	69	98	0	0	304	2	0	1	34	71	8/22/80
Doug Everett, Enid OK	19	512	80	299	16	0	324	4	6	0	43	74	13/17/79
Dave Brumfield, Muncie IN	20	503	96	8	1	0	21	1	0	0	22	78	1/4/80
Fred McCormack, Fargo ND	21	504	97	301	2	39	424	3	0	0	46	74	8/3/80
John Jefferson, Concord CA	22	494	85	193	35	0	20	2	2	0	34	57	10/13/79
John Baling, Prosser MN	23	346	45	107	2	0	364	4	0	0	41	75	8/21/80
Ken Slason, Lake Worth, FL	24	274	97	201	0	0	284	2	1	4	36	66	7/26/80
Eric Pader, Bayville NY	25	257	53	15	0	0	164	1	0	0	18	74	8/21/79
Paul Tranka, Buffalo NY	26	250	53	19	0	0	18	1	0	0	19	76	10/15/79
Michael Hogan, Highland IN	27	185	42	16	0	0	19	0	0	0	19	74	7/1/80
John Boldue, Mashua NH	28	170	57	7	0	0	94	0	0	0	10	77	8/20/80
Robert Schweitzer, E. Brunswick NJ	29	147	24	11	1	0	13	1	0	0	14	76	6/29/80
Dave Kaseall, Fortville IN	30	144	16	3	0	0	7	1	0	0	8	64	7/21/80
Frank Wheeler, Erie PA	31	123	10	15	1	0	174	0	0	0	18	78	7/30/80
John Miller, Milbank SD	32	112	35	21	0	0	174	1	0	0	19	79	8/6/80
Wm Hepburn, Niagara Falls ON	33	94	3	3	0	0	5	1	0	0	6	78	4/16/79
Paul Mount, Nelsonville OH													

*-Verified. \$-Updates required by 12/5/80.

FM Scoreboard definitions: TOTAL = total number of FM stations logged. (Freq. changes count as a new station, call letter changes DO NOT count.) 88-92 = all stations logged from 88.0 to 91.9 MHz. Es = total number of stations logged via E-skip. MS = total by meteor scatter. Au = total via Aurora. USA = total number of states and the + = Washington DC. CH = number of Canadian provinces logged; MI = number of Mexican estados (or states) logged; PO = number of foreign countries logged, but not Canada or Mexico. TPU or "total political units" = sum of USA CH MI & PO. YS = the year you began DXing.

STATES STATE

State	DKer	State	DKer	State	DKer	State	DKer	State	DKer	State	DKer	State	DKer
AL	48-tm	44-ab	IN	136-rs	126-ab	ME	24-ab	23-je	SC	32-je	24-db	AT	13-db
AK	None		IA	88-je	65-ab	NV	12-fm	7-ji	SD	20-fm	17-je	BC	5-fm
AR	22-fm	21-je	KY	54-db	40-fm	NE	17-je	16-rs	TX	64-tm	60-ab	NB	13-fm
AZ	59-rs	36-tm	KS	73-ab	36-rs	NJ	54-je	36-rs	TX	211-rs	144-ab	NB	1-ab
CA	189-ji	74-fm	LA	53-rs	36-rs	NH	34-ab	27-je	UT	18-ab	17-rs	WP	8-fm
CO	49-ab	34-ji	MS	29-ab	25-je	NY	147-fm	132-je	VT	8-ab	8-rs	NS	8-fm
CT	38-ab	32-ji	ND	35-je	21-je	NC	99-je	47-db	VA	38-je	32-db	ON	51-fm
DE	11-sw	9-ji	MA	73-rs	63-je	ND	17-fm	13-ab	WA	15-ji	10-je	ON	38-ab
FL	106-ab	82-db	MI	93-rs	92-rs	OK	156-rs	119-ab	WV	22-rs	22-ab	PEI	1-ji
GA	44-je	43-db	MN	106-je	62-fm	OK	67-db	37-fm	WI	109-je	90-ab	PA	17-fm
HA	None		MO	60-tm	33-fm	OR	16-fm	8-ji	WY	13-ab	7-ji	SA	6-fm
ID	17-db	13-rs	MS	82-ab	72-db	PA	90-je	90-fm					
IL	170-ab	143-rs	MT	15-ab	14-je	RI	8-rs	7-ab	DC	13-sw	13-tm		

+ means 2nd place tied with others. The key to DKers' initials/DK locations listed below:

je-John Boldue NH	tm-Tim McVey TN	rs-Rick L. Sanford TX
ab-Andy Bolin IL	fm-Fred Nordquist NY	rw-Roger Winsor IN
db-Dave Brumfield IN	je-Joseph Smith NY	sw-Steve West PA
db-Danny Buntin OK	wh-Wm Hepburn ON	Send in any FM distance
ab-Mike Bogaj CT	ji-John Jefferson CA	records/scoreboard/states
rs-Vernon Eaton AR	fm-Fred McCormack ND	State by 12/5 -73 Fred
	je-John Jefferson CA	
	fm-Fred McCormack ND	
	je-John Jefferson CA	
	fm-Fred McCormack ND	

QSL CORNER

Thomas J. Yingling, Jr.
221 Pinewood Road
Baltimore, MD 21222

FM-QSL

- AR YAMS 95.1 Mammoth Springs. Letter from Paul Leirman, CE says there are 75kw horizontal polarization only. They're country/western. Cooper
- WASU 91.9 Johnboro, Drawer "BDR", State University. Letter from Charles Raspberry, Dir. of Broadcasting. Cooper
- WV WSTW 93.7 Wilmington, 2727 Shipley Rd. Letter from Joseph W. Jones, Eng'neer, an NRC Member. They're heard in Texas some years ago, he says. Cooper
- FL WJCT 89.9 Jacksonville, 2037 Main St, 32206. FVGO stationary with signer of Lee A. Young, CE & program guide. Chernos
- WVEY 94.1 Pensacola, Town & Country Plaza, P. O. Box 8057, 32505 with signer on letter Frederic T. C. Brewer, Pres. Charnon (my v/s was Gene Pfalter; ed.)
- IL WFSB 91.9 Springfield, Sangamon State University, 62708. Received in 2 weeks from Dir. of Eng. James A. Newbanks. Ross
- MAUM 107.9 Aurora, 820 Eola Rd, 80504. Received in 2 weeks from General Sales Mgr, David W. McAlvey. Ross
- MDOW 95.9 Duquoin, Hwy 51 N., P. O. Box 190, 62832. Letter & map from Program Director, Gary R. Showalter. Yingling
- WHEX 88.3 Chicago, University of Chicago, 5708 University Ave, 60637. Letter from James R. Fowler, CE for report of a 10 watt station. Strobel
- IA KLFM 104.1 Ames, 428-5th St, P. O. Box 1647, 50010. Letter from Rich Weiss, Operations Manager. Eddie
- WEMD 92.9 Dubuque, 8th & Bluff Sts, 52001. Letter from Marc Karrmann, CE Eddie
- KS KOSH 105.5 Chanute, P. O. Box 748, 66720. Letter from Al Diller, CE Eddie
- KHUN 89.1 Wichita, 1751 W. Fairmont, 67208. Very friendly, formal verbiage letter in 2 weeks from James Sennsback, CE who calls RF propagation a "very whimsical thing" He also stated that "its unusual that the signal is copied so clearly I almost expect to start receiving membership applications from your area." Hepburn
- W256AC 107.9 Salisbury, translator of WRRS-95.1 Baltimore. This is an one watt station operated by the Calvary Baptist Tabernacle of Salisbury, not by WRRS-FM, with antenna up 350 feet with the yagis aimed southeast, south, southwest & west. Holbrook
- MI WRRS 88.1 Ypsilanti, Eastern Michigan University, 48197. Letter from R. E. Jacques, Station Manager, who says "We utilize a directional antenna to protect a Windsor station & therefore only radiate 515 watts in your direction. Total power is 16 kw. Ellis
- WRRN 80.3 Ann Arbor, 530 Student Activities Bldg. Letter from Judy Schwartz, Program Director for 10 watt station, antenna up 173 feet. Strobel
- IN WYRO 92.1 Little Falls, 62 E. Broadway, 56345. Letter from Joseph M. Benson, General Manager. Holbrook
- ND KTTS 94.7 Springfield. Letter from Keith Olson, CE in 2 weeks says "Put for you to receive us in Nevada, believe you had a little help from the sun by way of an "E" layer. I wish you a lot of luck in your dx'ing." Hart
- NY WQTX 90.1 North Greece, P. O. Box 300, 14595. Letter from Louis Retstadt, General Manager, supervisor of Broadcasting, Communications. Ellis
- ON WDRB 94.9 Medina, 4986 Gateway Dr, 44258. Personal letter verbiage, signed by A. Truett, CE, enclosed "Cruise" receive book, sheet of general info, 3 pieces of programming, showing weather men, etc. promotion showing interior of station, coverage-map & chronological data. Most information of any station I've ever received. Wheeler

Reporters this time are: Ernest Cooper, Saul Chernos, Robert Ross, Richard Eddie, Mark Holbrook, Ralph Strobel, Albert Ellis, William Hepburn, John "Whush" Hart, & Tom Yingling; et. I like to thank all the new reporters that I have underlined. 73's for now.

Turn

REVIEW:

AKAI AT-V04 AM/FM TUNER

by PETER SAWATZKY, VE3IXQ

While numerous 'synthesized' receivers and tuners are currently available on the market, none to date have offered features useful to the serious FM DXer. While digital frequency readout is a significant improvement over analog dial readout on conventional tuners, it should be noted that most such units are of the phase locked loop (PLL) variety.

While this type of circuitry offers some interesting features such as random access 'preset station' capability, and has the advantage of precise tuning, it must be remembered that the tuner cannot be detuned from any of the 100 allocated frequencies. This is a considerable disadvantage to the DXer, especially in an area where many locals are present, as it is frequently necessary to receive a weaker station on an adjacent frequency by tuning further away from the stronger station, but certainly not by a full allocated frequency as would be dictated by a PLL synthesized tuner. Consider also the case where a foreign station not on an American allocated frequency were to be received. The PLL tuner could not be detuned to a 'split' frequency. This might also be a consideration in the event the FCC were to begin allocating split frequencies or adding allocated frequencies above or below the present 88.1-107.9 MHz range. Any re-allocation of the present FM broadcast band would effectively render the PLL synthesized FM tuner obsolete.

Also, it has been noted that FM tuners consisting of varactor-type front ends tend to, on the average, have lower sensitivities at signal levels below those used to establish IFR sensitivity ratings. This is presumably due to differences in the quieting curves. This phenomenon is evidenced by Pioneer's 'Supertuner' line. Both the KP500 and the KE3000 models are acclaimed by Pioneer as consisting of their 'Supertuner' design and both have identical sensitivity specifications (according to Pioneer's own manuals), but the analog KP500 model was noted to have considerably greater sensitivity at the low signal end than its KE3000 PLL-type counterpart.

The only other commonly available type of FM tuner with digital frequency readout consists basically of a conventional analog tuner with circuitry (commonly a dedicated IC) which converts the local oscillator to a digital signal, which, when driven into the display, shows the frequency to which one is tuned. Frequently the digital display in this type of design is complemented with a conventional analog dial for those who are squeamish about converting to a full digital design all at once. The prime disadvantage in this type of design is that the 'preset station' recall capability and the 'auto-scan' and 'search' capabilities cannot be incorporated, because essentially the tuner is not digital and hence cannot be digitally controlled to produce these features.

While these latter features may initially not appear to be of great interest to the FM DXer, it should be noted that most DXers are at many non-DX times also listeners and/or may tape music, which makes both a much

AKAI AT-V04 AM/FM TUNER

simpler and more pleasurable experience. Having had experience with such features renders them almost indispensable. Most of these latter non-PLL type tuners also offer only 0.2 MHz display increments, or, at best, 0.1 MHz increments. This offers only marginal usefulness towards frequency readability when detuning from strong signals to receive weaker adjacent channel stations.

Now comes the Akai model AT-V04, offering the best of both worlds and incorporating additional features which many of either of the previous types do not have.

Firstly, the AT-V04 features a 'fluorescent' digital readout with display increments of 0.05 MHz. This aids significantly in true frequency readout when detuning, as previously mentioned, is required.

While the unit is billed as a 'digital synthesizer' tuner by Akai, it is obviously not of the PLL variety. This is evidenced by the fact that in spite of its full complement of auto-scan, search and preset station capabilities, it is capable of full manual override--not incremental as in the case of conventional analog tuners.

Hence, the AT-V04 is basically a dual-mode tuner, capable of PLL-type scan, search and preset station capabilities, but converting at the touch of a tuning knob (literally--the tuning knob is touch sensitive) to fully analog operation.

First, let us examine the non-manual tuning mode. 'Auto' tuning incorporated a two-position momentary contact switch, one position for down-tuning and the other for up. By depressing the switch momentarily on either side, the tuner tunes in the corresponding direction on the band until a station of at least a preset signal level is found. The audio is muted until the station has been found and locked onto. If, however, one wishes to bypass several stations, one simply maintains the 'auto' tune switch in the depressed position until the frequency readout indicates that area of the band just prior to which the station of interest is located. At this point, release of the switch will cause the tuner to lock onto the next available station which produces at least a certain signal strength (internally adjusted). The tuner is not of the PLL variety in spite of the fact that it uses a varactor-type front end. Auto-tuning is accomplished by means of a digitally controlled analog voltage ramp inserted into the varactor tuner. This scheme necessitates a frequency readout circuit based on the local oscillator frequency, as in the case of the common non-PLL type analog tuners with digital frequency readout. Of particular interest in the auto tuning mode is that 'scrolling' is possible--i.e. the voltage ramp is controlled in such a manner that once one tunes to the top of the band and continues to up-tune, it automatically resumes up-scanning from the bottom of the band, and of course, the converse is true for down-tuning. Unlike PLL-type tuners, the full tuning range goes well beyond the allocated band of 88.1 through 107.9 MHz, extending from 87.40 to 108.20 MHz. This is quite useful in that it enables reception of channel 6 TV audio which is a good indicator for FM sporadic E-skip in areas with no strong channel 6 locally.

The manual mode of tuning is engaged by touching the manual tuning knob which is electronically touch sensitive. When changing from the auto-tuning to the manual tuning mode (and vice versa), muting is automatically engaged for a period of a second or so. Manual tuning is equivalent to that on a conventional tuner, with infinite resolution. Scrolling is not possible, however, in the manual mode and manual tuning, when selected, returns the frequency to that last selected in the manual tuning mode, not that last obtained in the auto-tuning mode. The reason for this is, that since the manual tuning mode utilizes the same varactor tuner, a multi-turn potentiometer (very smooth in operation) is used as a voltage divider to vary a DC voltage into the varactor tuner stage. When returning to the auto-tune mode, however, up/down scanning resumes from that frequency to which the manual mode was used to adjust the frequency.

AKAI AT-VO4 AM/FM TUNER

A total of 14 stations can be programmed into memory—7 on FM and 7 on AM. These can be programmed into memory while in either manual or auto-tuning mode. It is interesting to note that in order to recall a station on a frequency, a station must be present on that frequency with a certain minimum signal strength, since the principle on which the tuner operates is that it searches for signal strength on or about the pre-programmed frequency, and then locks onto it. If, for example, the tuner were programmed for a strong station on 92.7 MHz, and that station were off the air when reselected in the preset mode, the tuner would look slightly on either side of that frequency. If it were to find a strong signal on either 92.5 or 92.9 MHz, for example, under these circumstances, it would lock onto one of these. If nothing was found, it would 'float' in an undefined state around 92.7 MHz without anything to lock onto. Up or down auto-tuning can also be resumed originating from any of the preset frequencies. Since the 'preset station' feature necessitates locking onto a station with a certain minimum signal strength, it is of minimal use to the DXer who wishes repeatedly to call up various good DX frequencies which would normally be vacant. In order to keep the memory intact while the tuner is not powered, the unit contains three standard 'AA' penlight batteries which need replacement approximately once a year. These are readily accessible in the rear of the unit.

The frequency readout is extremely visible, even under high ambient light conditions, due to the bright 'fluorescent' display technology used. The fluorescent display also includes an "AM" and "FM" display and a "MHz" and "kHz" display. The digits are about 4" high and are clearly visible across a large room.

In addition to the attractive blue frequency readout, the AT-VO4 is endowed with a full complement of rather impressive LED indicators. Each of the 7 preset station switches has above it a green LED to indicate which preset station has been selected, when in that mode. An 8th switch which enables preset station programming into memory also has above it a green LED to indicate when the tuner is in the programming mode. A five-segment red LED array indicates signal strength. While this type of display cannot be as definitively read as an analog meter, it has found to be adequate except when weak stations are selected. A center-tuning display comprises three LED's, two red and the center one green to indicate when the station of interest has been tuned in correctly. The stereo indicator LED is red. Also, a green LED above the manual tuning knob is turned on when that mode is selected. It is impressive and pleasurable to view the signal strength, center-tuning and stereo LED's change continually while tuning, especially in the auto-tuning mode.

Other front panel features and controls include three levels of muting (one off, one internally preset and the last user-adjustable via a rear panel control), a stereo/mono mode switch, AM/FM selector switch and power switch.

Rear panel controls include the previously mentioned muting level control, an audio level control to control the audio output level to your amplifier, and separate local/distant switches for both AM and FM to reduce signal levels in areas with overload problems. Overload, incidentally, has not been noted to be a problem with this tuner.

Antenna inputs include three separate sets of FM connections, one 75-ohm screw-terminal type, one 300-ohm screw-terminal type and the other a coaxial 75-ohm connector type (although not F59 connector compatible). AM antenna input consists of a built-in adjustable ferrite bar antenna as well as an external input (for which, it would appear, a European style of connector may be required). Only a single set of phono output connectors is provided—i.e. if taping capability is desired, it must be done directly from the amplifier. Also, unfortunately, the AT-VO4 does not have a separate 8-ohm headphone output.

Performance-wise, the AT-VO4 is state-of-the-art. Its 1.6 uV IHP sensitivity rating and greater than 75 dB alternate channel selectivity rating can almost be believed, as when it was compared A-B with the classic

AKAI AT-VO4 AM/FM TUNER

Sony ST-5130, negligible differences were noted on either parameter. It is conceivable that the AT-VO4 might even outperform that unit if more scientific measuring techniques were utilized. As already noted, the AT-VO4 has no problem with overload, at least certainly no more so than the ST-5130. In A-B tests, the full quieting stereo audio signal to noise ratio was as good as, if not better than, that of the ST-5130 and in overall terms sounded better than the ST-5130 due to much higher treble response. Even with full treble on the amplifier, the ST-5130 does not have nearly enough high-frequency output to produce the clean clear sound of the AT-VO4. No significant difference in bass response was noticed.

The AM section, although very selective, has rather poor audio in terms of frequency response, sounding much like a juke-box. The frequency readout for the AM band consists of 1 kHz increments which makes the tuner potentially very useful for foreign broadcast band DX. Unfortunately, the frequency readout for the AM band is frequently off by one or two kHz, but these minor shortcomings on AM should be of little consequence to the FM DXer.

The most outstanding physical feature of the AT-VO4 is its extremely low profile (only 3.1" high) which enables placement into very compact environments. Both black and silver panel models are available. The unit is fully enclosed with no air vents (the unit dissipates very little power in terms of heat) and has no wooden cabinet. In all, extremely attractive styling for an otherwise exquisite tuner.

At \$420 (MSL in Canada; Canadian dollars), the AT-VO4 is a bargain. If anything bad can be said about this tuner, it may be its availability, or lack of it. Toronto Akai sources claim a considerable log of back-orders, indicating either a production problem at Akai and/or an overwhelming response by the consumer. The latter seems unlikely in view of the minimal promotion Akai appears to have made. While several vague references have been seen in audio magazines, no major commercial promotion campaign has been noted. Remarkably, however, the AT-VO4 can, along with several other new Akai components, be viewed on posters on the rear of Guelph, Ontario city buses. It is not known what the delivery situation in the U.S. is at this time. A long-awaited AT-VO4 did finally come through for an audiophile friend though, so presumably the delivery situation is not hopeless.

The only other possible complaint might be that, although much sophisticated large scale integration (LSI) technology is used throughout the tuner, many of the functions should have been achievable with the use of a single general-purpose microprocessor chip. This might have reduced parts count which, as can be seen in the schematics, is quite high and eliminated the need for some of what may be custom LSI (which might prove difficult if not impossible to find in the distant future in case of parts failure).

Let us hope that the AT-VO4 is a sign of technology to come, although this may be a somewhat optimistic outlook. The dual-mode non-PLL tuning feature, while ideal for the FM DXer, may not necessarily be appreciated for what it is by the average consumer or even audiophile, and hence may not set a trend in tuner technology. It would be in the best interests of any serious FM DXers, therefore, to seek out all available AT-VO4's, lest they should soon become much sought-after but discontinued models, as was the case with the Sony ST-5130 in its heyday. That tuner was discovered by the majority of DXers only well after it was out of production.

U.S. headquarters for Akai America, Ltd. are located at 2139 E. Del Amo Blvd., Compton, California 90220. Manufacturer's specifications, illustrations and schematics (on this month's VUD cover) follow:

AT-VO4**AT-VO4/L**MODEL **AT-VO4**

DATE MARCH, 1980

I. TECHNICAL DATA**FM TUNER SECTION**

Frequency Range	87.5 MHz to 108 MHz
Sensitivity (IHF)	1.6 μ V
Capture Ratio	1.2 dB
Selectivity (IHF)	More than 75 dB
Image Rejection	More than 80 dB (98 MHz)
IF Rejection	More than 95 dB (98 MHz)
Spurious Rejection	More than 95 dB (98 MHz)
AM Suppression	65 dB
Signal to Noise Ratio	75 dB
Harmonic Distortion	
MONO	Less than 0.08 % (100 % modulation)
STEREO	Less than 0.1 % (100 % modulation)
Muting	OFF
	1. 30 μ V
	2. 10 μ V to 100 μ V
Stereo Separation	More than 54 dB (1 kHz)
Sub Carrier Suppression	More than 80 dB
Output Voltage	Controllable from 0 to 1.5 V (100 % modulation)
Antenna Input Impedance	300 ohms balanced, 75 ohms unbalanced

AM TUNER SECTION

Frequency Range	520 kHz to 1,605 kHz
Sensitivity (IHF)	150 μ V/m (bar antenna), 10 μ V (external antenna)
Selectivity (IHF)	More than 30 dB
Image Rejection	More than 55 dB (1,000 kHz)
IF Rejection	More than 40 dB
Signal to Noise Ratio	More than 55 dB
Output Voltage	Controllable from 0 mV to 500 mV (30 % modulation)
Antenna	Built-in ferrite bar antenna
Power Requirements	120 V, 60 Hz for USA and Canada 220 V, 50 Hz for Europe except UK 240 V, 50 Hz for UK and Australia 110 V/220 V/240 V, 50/60 Hz internally switchable for others.
Dimensions	440(W) x 78(H) x 332(D) mm (17.3 x 3.1 x 13.1) inches
Weight	5.5 kg (12.1 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

TELE-PHOTO CUSTOM LAB

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Exposures	Price
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Print Size	Price
4 X 5	.20
5 X 7	.50
8 X 10	.70

Film developing (no prints) .50

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Print Size	Price
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8 X 10	\$1.25

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